

# **Slouching Towards Utopia?: An Economic History of the Long Twentieth Century**

## **XVI. Thirty Glorious Years**

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### **16.1: Refinding the Path Toward Utopia**

1800-1870 saw invention and innovation in technology and organization open the door open to a better world, one in which humanity was not desperately poor under the harrow of Thomas Malthus's fears of limited resources, near-stagnant technology, and population pressure. 1870-1913 saw humanity walk through that door.

1914-1948 or so saw the door more than half-close. There was the Great Depression. And there was the destruction of World Wars I and II. There were the civil and revolutionary wars—the last of which, China's, did not come to an end until 1949. Growth in living standards over 1913-1938 was cut in half relative to 1870-1913, roughly back to or even below its 1800-1870 pace. Technology and organization were more used to kill and oppress than to free and enrich. Globalization went into reverse: countries raised barriers against imports to protect their own domestic producers. Wars sank ships. Wartime dislocations destroyed comparative advantages, and made investors and others wary of trying to construct new ones.

There was not that much ground for optimism in the immediate aftermath of World War II. Looking around at ideological challenges, at political mechanisms, and at dilemmas of growth and distribution

One, the greater, totalitarianism had been scotched—Nazi Germany. But another, if lesser, flavor—Stalin’s and Mao’s versions of really-existing socialism—were growing. They were materially weak, and poor. But they were populous. And they had a disturbing ability to get people to endorse and fight for their cause by telling implausible lies—even about their own high cadres. Millions cheered in 1969 because the Maoists had rescued China from the traitorous American agent Liu Shaoqi: the Liu Shaoqi who had replaced Mao Zedong as President of the People’s Republic of China in 1959, and whom Mao had chosen as his own heir in 1961. And almost all believed it. And their rulers had some... disturbing tendencies. The don’t-rock-the-boat-peaceful-coexistence generation of leaders of the Soviet Union after Stalin were horrified to hear Mao claim that nuclear war would be good for civilization: half the world’s people would die, but those who were left would be socialists, and in two generations they would bring global population back to its then-2.7 billion—“The East Wind is prevailing over the West Wind”.

Representative and parliamentary democracy looked in no better shape after World War II than it had been in 1914. The politicians who could rise in a system of representative democracy were those who told their slices of the electorate what it wanted to hear and delivered the goodies to rent-seeking interest groups: they were not the statesmen their countries needed. So it had been in the runups to World Wars I and II, in the aftermath of World War I, and in the Great Depression.

The global economy would continue to deliver political and economic dislocations, and people would continue to not be happy. A market economy could deliver progress and growth at the cost of frequent depressions and “creative destruction” that swept away all positions, privileges, and rights that were not backed up by valuable property rights. As Karl Polanyi had argued, societies did not like that. And their reaction had delivered the catastrophes of 1914-1948. Would things be any different looking forward from the end of World War II?

And yet the world picked up its mat and walked—nay, ran—forward towards true utopia.

From 1938 to 1973 measured economic growth in the future G-7 jerked forward: not at the 0.7%/year pace of 1913-1938 or even the 1.42%/year pace of 1870-1913, but at an average pace of 3.0%/year. That is a material-wealth doubling-time of not the 100 years or so of 1913-1938 or even the 50 years of 1870-1913, but 23 years: less than a generation. The G-7 was three times as well-off in 1973 as it had been in 1938. Japan grew at a previously unseen 4.7%/year—in spite of Curtis LeMay’s

firestorms and two atomic bombs that incinerated Japanese cities in 1944-1945. Canada and Italy grew at more than 3%/year. But they were not alone—Mexico and Spain as well as others achieved that rate of growth as well. The French call this period the Thirty Glorious Years: the *Trentes Glorieuses*.

## 16.1: Present at the Creation

Somehow, after World War II, nearly everything went right. Interwar and pre-World War I rich-country governments had been hobbled by their rejection of any mission to ensure general prosperity. That doctrine of *laissez-faire* had started out as a weapon to dismantle aristocratic mercantilism and then turned into a weapon to fight progressive taxes, social insurance programs, and “socialism” more generally. After World War II it had evaporated. The Great Depression had, in the United States at least, convinced the middle class that it had powerful interests in common with the working class—hence social insurance and macroeconomic stabilization at full employment were things demanded from all political parties that sought votes. And the totalitarian threat from Stalin’s Soviet Union across the Iron Curtain created the North Atlantic alliance willing to follow America’s lead.

So much good luck in one package was unexpected, and is still to marvel at.

### 16.1.1: The End of *Laissez-Faire*

#### 16.1.1.1: *Laissez-Faire*’s Career

*Laissez-faire* had been the idea that the government should simply let the economy alone. The government should step back, limiting its economic role to the enforcement of contracts and protection of property rights. All beyond the duties of the “night-watchman state”—all beyond enforcement of contracts and protection of property rights—was “intervention” into the economy, and was guilty until proven innocent. Truth be told, *laissez-faire* was never the policy recommendation of any near-consensus of economists. *Laissez-faire* was, rather, what other people thought and wrote that governments had applied and economists had taught.

Nevertheless it had been a very powerful doctrine. Always in the background and often in the foreground it constantly resisted expansions of taxation, of regulation, and of the state—especially those aimed at redistributing income and wealth in a progressive direction—up until the Great Depression. Whenever there was a cruelty or a disorder in the market that might be alleviated by regulation or some

other form of government regulation, there would be those who would sagely write that any such would do more harm than good—have a perverse effect. There would be an Andrew Carnegie to explain why wide inequalities in the income distribution would be for the best. There would be a Joseph Schumpeter to explain to his students that the 20%-plus unemployment of the Great Depression was a good, healthy thing.

The idea had been politically and sociologically useful to the rising and then dominant business classes from the late 1700s to the 1900s. At the start it was a weapon against the previous land-military-church aristocracy that had crafted the forms of government to enhance their own wealth and power. At the end it was an equally powerful weapon against demands from working classes for a larger share of the pie, especially when buttressed by the social darwinist claims that, again in Keynes's words: "interferences... [were] not merely inexpedient, but impious, as calculated to retard the onward movement of the mighty process by which we ourselves had risen, like Aphrodite, out of the primeval slime..."

But by the 1950s it was Republican American President Dwight Eisenhower who wrote, in a letter to his brother Edgar, that *laissez-faire* was dead, and that attempts to resurrect it were simply "stupid::

It is quite clear that the Federal government cannot avoid or escape responsibilities which the mass of the people firmly believe should be undertaken.... If a rule of reason is not applied... we will lose everything.... This is what I mean by my constant insistence upon "moderation" in government. Should any political party attempt to abolish social security, unemployment insurance, and eliminate labor laws and farm programs, you would not hear of that party again in our political history. There is a tiny splinter group, of course, that believes you can do these things. Among them are H. L. Hunt (you possibly know his background), a few other Texas oil millionaires, and an occasional politician or business man from other areas. Their number is negligible and they are stupid...

### 16.1.1.2: The Rearguard

There was a rearguard. There were a few who continued to argue that once the government ventured outside the limited bounds of enforcement-of-contracts and protection-of-property that iron laws of power would push it to totalitarian extremes that would destroy all human liberty, leaving universal serfdom. There were desperate intellectual attempts to claim that it was not some *grand mal*

seizure disease of the market economy, but rather government interference, that had somehow caused the Great Depression.

But those attempts fell apart into incoherence. And they fell apart into cultish squabbles among what was the remnant of the right. Was, as Milton Friedman and his acolytes argued, the the government failure that caused the bad thing that was the Great Depression the government's failure to massively print cash on a much grander scale in order to satisfy the demand for cash? Was, as Friedrich von Hayek and his acolytes argued, the government failure that caused the bad thing that was the Great Depression the fact that the government had printed any money at all—had fallen victim to the “dogma of the stable price level” and failed to enforce a natural and healthy deflation on the economy in the 1920s? Was, as the acolytes of Joseph Schumpeter argued, the government failure the fact that the government did not recognize that the Great Depression was in fact a good thing, and so tried to cure it before it had run its natural course and creatively destroyed the economy into a higher prosperity?

### **16.1.2: Leninist and Fascist Alternatives**

if you had told anyone before 1930 that by the end of the 1930s *laissez-faire* would have been dead as a doctrine for guiding economic policy, they would probably have jumped to the conclusion that the end of *laissez-faire* meant the arrival of some form of Leninist socialism: the end of the market economy, and its replacement by a socialized, militarized economy in which the government owned everything of value and directed who should go where and work on what. There was fear of—and hope for—the alternative to *laissez-faire* would be some organized collectivist Leninist dystopia or utopia.

Had not the years leading up to 1929 seen the increased monopolization and concentration of the economy? Were not the largest firms in 1929 bigger than whole economies had been half a century earlier? Did not major investment banking firms like J.P. Morgan and Company (in the U.S.), the Deutsche Bank (in Germany), or the Yasuda zaibatsu (in Japan) exercise a remarkable amount of command and control over the economy's large-scale investment decisions? As Vladimir Lenin had written during World War I:

When a large enterprise... on the basis of exact computation of mass data, organizes according to plan the supply of primary raw materials to the extent of two-thirds or three-fourths of all that is necessary for tens of millions of people; when the raw materials are transported to the most suitable place of production,

sometimes hundreds or thousands of miles away, in a systematic and organized manner; when a single center directs all the successive stages of work... then it becomes evident that we have socialization of production... that private economic relations and private property relations constitute a shell which is no longer suitable for its contents... [and] which will inevitably be removed...

Lenin—and many others—had seen socialism already fully built in the large organizations of vertically-integrated manufacturing firms and in the loose financial empires of bankers: the new economy in the womb of the old. *Laissez-faire* advocates had promised that the market economy could deliver. And in the 1930s it had not. It was time for socialism. And by 1945 there was a socialism up and running in the USSR. Lenin and Stalin's brand of socialism had turned a country of peasants, animal-powered small farms, and craftsmen into a country of industrial workers, machine-powered collective firms, and factories. They had—they claimed—done in one generation the economic transformation that had taken five generations in Britain. And it was their, not the Johnny-come-latelies who has only dared put troops into northwest Europe in the final year before the Nazi collapse, citizens who had spent the blood that had won World War II against the Nazis.

Into the 1950s, many outside the USSR—take left-wing economist Paul Sweezy, fired from Stanford for being a communist during the McCarthy era even as the establishment pontificated about the importance of maintaining academic freedom for one—would confidently predict that Leninist socialism and government planning would deliver a more efficient allocation of productive forces and a faster rate of economic growth than any alternative system. Many who feared Leninist socialism as destructive of human liberty, happiness, and high mass consumption agreed that the USSR and its satellites were likely to forge ahead in total and per capita production. Really existing state socialism had inefficiencies, but market economies—as the Great Depression had proved—had gross inefficiencies too. And even if centrally-planned economies of scale did not outweigh inefficiencies from abandoning market coordination, a centrally-planned economy would have no difficulty in attaining a high rate of investment. Paul Samuelson—no Leninist he—had the leading post-World War II American economics textbook. Up until the late 1960s its forecasts showed the USSR surpassing the American economy in production per head well before 2000.

Perhaps in the 1930s some form of fascism might have been seen as an alternative mode than some Leninist really-existing socialism. Preserve some traditional orders and hierarchies, prioritize the ethno-nation and its resentments of outsiders

who did not fully belong to the national community over the class as the organizing principle, prioritize full employment rather than financial orthodoxy, and have a strong leader knock heads and purge bodies to keep those who wanted to nationalize property under the bureaucratic control of the government out of power—perhaps that was the wave of the future that could resist really-existing socialism. Certainly many in Europe who feared Lenin and Stalin thought so. Right-wing economist Ludwig von Mises wrote: “Fascism and similar movements aiming at the establishment of dictatorships are full of the best intentions and that their intervention has, for the moment, saved European civilization. The merit that Fascism has thereby won for itself will live on eternally in history...” Right-wing anti-socialist, anti-liberal, and anti-Nazi political philosopher Leo Strauss called for fighting against Hitler on the basis of the “principles of the right, that is from fascist, authoritarian and imperial principles...”—although, for Strauss, the “fascist principles” he was thinking of those may well have been those of the Roman Republic rather than those of Mussolini. But fascism was defeated in World War II.

What then was the alternative that was to replace *laissez-faire*? It was social democracy. It was the mixed economy. It was a Keynesian escape hatch that combined market economies with a dose of light central planning, public funding of programs to advance societal well-being, and progressive taxation.

### **16.1.3: The Coming of Social Democracy**

But what succeeded *laissez faire* was not socialism but something called the “mixed economy.” That had by the end of World War II become the dominant ideology in the world economy’s North Atlantic industrial core. That provided North America and western Europe with a Keynesian escape hatch from what had been insoluble crises and contradictions in the interwar period.

Some countries attempted to exit depression through the Keynesian escape hatch in the 1930s. They had indeed done relatively well. The Great Depression was relatively mild in countries that had devalued their currencies early, printed money and inflated their price levels, ensured low interest rates, and had run large budget deficits. World War II provided further proof: In the United States unemployment had been called “structural” or “permanent” during the 1930s, and had appeared immune to the self-adjusting forces of the market as well as to the entire armament of the New Deal. That unemployment vanished entirely in the 1940s under the pressure of vastly expanded government spending. The United States fought World War II without reducing the real value of civilian consumption: all U.S. war production came from new capacity, or from capacity that stood idle at the end of

the 1930s.

In retrospect, the accidentally Keynesian policies of moderate expansion, inflation, and devaluation in the interwar period might have owed some of their success to the fact that they were the exception rather than the rule. To the extent that the background assumptions of gold standard discipline and deflation remained in force, accidentally “Keynesian” might have been more effective when implemented against this background. But there was a catch-22: any strong attachment to gold-standard principles would ensure that Keynesian policies would not be systematically undertaken—for central bankers and politicians shared the same background assumption about how the world should work.

One way to read Keynes’s *General Theory* is as a confident prediction that all that was needed in order to remove the major deficiencies of *laissez-faire* were relatively minor reforms, and that such relatively minor reforms could successfully stabilize the economy with nearly-perpetual full employment. An activist welfare-state government with a commitment to full employment had the tools to level the distribution of income, eliminate Great Depressions, and could put economies back onto the road to utopia. If governments would only lower interest rates and spend money freely (without raising taxes) in times when total demand was low and raise interest rates and raise taxes (without spending) in times when total demand was high, Great Depressions could be avoided.

Thus Keynes won the bet he had placed in his *General Theory*, claiming that his plans for “adjusting to one another the propensity to consume and the inducement to invest... as the only practicable means of avoiding the destruction of existing economic forms in their entirety and as the condition of the successful functioning of individual initiative”, and pointing out that as long as full employment could be maintained: “there will still remain a wide field for the exercise of private initiative and responsibility” where “the traditional advantages of individualism will still hold good”.

And, indeed, when you look closely at what the critics of the Keynesian order were saying, many of them were engaged in simply “saving the phenomena”. For example, Milton Friedman promoted monetary policy and eschewed fiscal policy as a stabilization tool. He believed that correctly carrying out a stabilizing monetary policy was simple, that fiscal policy was less effective than monetary policy, and that the deficit spending associated with the use of fiscal policy to ensure full employment carried long-run dangers of its own in the form of ultimate fiscal insolvency. It turned out he was wrong: correctly carrying out a stabilizing



monetary policy was not at all simple. But at the bottom the message was the same: a government that intervened on as large a scale to guide spending could guard the economy against Great Depressions without succumbing to the trap of socialist ideals leading to an over-mighty government that would in the end destroy political liberty and economic prosperity. It was just that Milton Friedman claimed that such intervention was not intervention at all, but only following a “neutral” monetary policy.

In the first post-World War II generation the Keynesian escape hatch provided governments, polities, and economies with what seemed like a miraculous solution to all the interwar dilemmas. It was no accident that U.S. Secretary of State Dean Acheson titled his memoirs *Present at the Creation*, for he and his peers truly had been present at the creation of an extraordinarily fruitful framework of political and economic institutions

So how did it happen that the first post-World War II generation of governments found their way to adopting the policies that led through the Keynesian escape hatch? And why was Keynes so right—why were his policy recommendations so apt for the post-World War II world?

## **16.2 Solidifying Social Democracy**

### **16.2.1: Cementing a Keynesian Order**

A first, very important factor helping to make post-World War II economic reconstruction a success was the shadow of the past. Post-World War II reconstruction took place against the background catastrophe of World War II and of the preceding Great Depression.

The political and economic struggle between parties and classes in interwar Europe had ended in the mutual ruin of the contending parties. Right-wing factions had wanted low wages, no welfare state, stable prices (along with social order and nationalist self-assertion); left-wing factions had wanted high wages and an extensive welfare state. The far left had no tolerance for the near left. Mainline politicians in the interwar period, whether social democrats looking forward to the implementation of the socialist Gotha Program or Clause IV, or right-wing politicians interested in demolishing the embryonic welfare state and restoring traditional authorities, had looked forward to establishing their vision of the distribution of wealth and the role of the government by overrunning opposition—

at the ballot box if possible, and through street violence and purges if necessary. The end of this political and economic struggle had been the rise of fascism and Nazism, which had benefitted no one.

The magnitude of Depression-era unemployment also shifted politicians', industrialists', and bankers' beliefs about the key goals of economic policy. Before the Depression a stable currency and exchange rate were key. But after the Depression even the bankers recognized that a high overall level of employment was more important than avoiding inflation: universal bankruptcy and mass unemployment were bad for workers, but they were worse for capitalists and bankers.

Thus entrepreneurs, the owners and managers of real capital—industry—and even the bankers found that they gained, not lost, from a commitment to maintain high employment first. High employment meant high capacity utilization. Rather than seeing tight labor markets erode profit margins by raising wages, owners of property saw high demand spread fixed costs out over more commodities and so increase profitability.

There is a sense in which Christian and social democracy, the twin political powers of the post-World War II world, evaded class-conflict based dilemmas of the interwar and pre-World War I politics because the shock of the Great Depression shifted politics from a concern over redistribution to a concern over production. All would lose heavily from another Great Depression. It seemed much more worthwhile to compromise, and to pursue policies that would enlarge the pie to be distributed rather than for either side—either the left or the right—to engage in substantial redistribution. For all parties the post-World War II mission became, in Charles Maier's words:

one of expanding aggregate economic performance and eliminating poverty by enriching everyone, not one of redressing the balance among economic classes or political parties. The true dialectic was not one of class against class, but waste versus abundance.

It is very hard to argue that accepting the “mixed economy” was a mistake for anyone. Had either owners or workers tried to hold out for more—as they did in the interwar period—they might well have ended up with far less. How far down must one go in the income distribution to find citizens of the United States or West Germany who were worse off in 1990, in a material sense, than the average citizen of Czechoslovakia was then, when the Iron Curtain fell?

## **16.2.2: In America**

In America the consolidation of the mixed-economy Keynesian social-democratic order was straightforward. America had always been committed to a market economy. Yet it had also always been committed to a functional government: a tradition established by Alexander Hamilton and his plans for a growing, urban economy back when George Washington was president. It lacked a landed aristocracy, and with the exception of John Jacob Astor's ownership of a large chunk of what became New York, it never developed one—water and later rail transport was cheap, and with the Amerindians killed and penned in reservations land was abundant, hence cheap. It had a slaveowning aristocracy, but that came to a bloody end in 1865. Thus the progressives had taken steps that might have led to a “New Deal” order at the start of the 1900s, had they not been turned back by the return to “normalcy” in the 1920s.

Combine that distant and recent history with the fortunate accident that the right-wing party was in power up until 1932 and hence were the bastards to be voted out and replaced by Franklin Delano Roosevelt and his coalition, and America's path was relatively smooth. In 1945 upon Roosevelt's death Truman picked up the reins. The electorate ratified the New Deal order by giving Truman his own full term in 1948. And in 1953 Eisenhower saw his task as containing the further expansion of what he muttered under his breath was “collectivism” rather than as rollback.

### **16.2.2.1: Automatic Stabilizers**

The 1946 Employment Act declared that it was the “continuing policy and responsibility” of the federal government to “coordinate and utilize all its plans, functions, and resources... to foster and promote free competitive enterprise and the general welfare; conditions under which there will be afforded useful employment for those able, willing, and seeking to work; and to promote maximum employment, production, and purchasing power”. Laws that establish goals can and do serve as markers of changes in opinions, perceptions, and aims. When people then speak of the effects of such a law, in many cases they are using “the law” as a shorthand marker to describe changes in the hearts and the minds of the people. Whether the goal is achieved or pursuit of the goal effects and constrains public policy depends on the depth of the change in hearts and minds.

The largest shift in policy marked by the 1946 Employment Act is the post-World War practice of allowing the government's fiscal automatic stabilizers to function.

For the past eighty-five years the federal government's budget slides into deeper deficit in recessions, and moves toward balance or into surplus when the economy expands. The gap between this calm acceptance of automatic stabilizers and cyclical fiscal deficits and pre-WWII attitudes is very large.

A good deal of this increase in automatic stabilizers comes from the increase in the size of the government as a share of national product. The pre-Great Depression American federal government taxed and spent at most 5 percent, and more typically 2 of national product in peacetime. The Depression-era government taxed 5 to 7 percent and spent 8 to 10 percent of national product. The post-WWII federal government taxes and spends one-sixth or more of national product in peacetime. In the post-World War II period, a 1 percentage-point increase in the U.S. unemployment rate has typically been associated with an 0.9 percentage-point increase in the federal deficit measured as a share of national product. About one dollar in three lost from private-side spending during a recession is made up by expanded government demand: decreased taxes and increased social welfare spending. Such automatic stabilizers are large enough to reduce by four-ninths the change in employment and GDP as a result of any negative economic shock.

#### **16.2.2.2: Unions and Income Distribution:**

The post-Great Depression settlement in the United States included a place for labor unions. In 1919, union membership in America was some 5 million. It fell to a trough of perhaps 3 million by Roosevelt's inauguration in 1933, grew to 9 million by the end of 1941, and took advantage of the tight labor market of World War II to grow to some 17 million or so by the inauguration of Eisenhower in 1953.

From 1933 to 1937 organizing unions became easier—in spite of high unemployment—because of the solid swing of the political system to the Democrats. The federal government was no longer an anti-, but a pro-union force. The Wagner Act gave workers the right to engage in collective bargaining. A National Labor Relations Board monitored and greatly limited the ability of anti-union employers to punish union organizers and members, which the post-World War II Taft-Hartley Act did not reverse. Employers in large mass-production industries learned to value the mediation between bosses and employees that could be provided by unions. And workers learned to value the above-market wages a union shop could negotiate.

Along with the 1930s rise and institutional entrenchment of the union movement there came the great compression of America's wages and salaries. In the late 1920s and 1930s, the top 10%, the top 1%, and the top 0.01% of the American population received 45%, 20%, and 3%. By the 1950s those shares were down to about 35%, 12%, and 1%, respectively. (By 2010 those shares would be up to 50%, 20%, and 5%.) To some degree this was because education had won its race with technology, temporarily making usually very poorly paid "unskilled" workers relatively scarce—and hence valued. To some degree this was the case because the closing down of immigration had similar effects on the supply of workers with no or shaky English. To some degree union threat and union power compressed the wage distribution. To some degree minimum wage and other regulations did the same. And to some degree the strongly progressive tax system instituted to fight World War II made attempts by the well-off to extract more wealth from the system at the expense of even a small amount of sand thrown into the gears of the economy unprofitable. If paying your CEO a much larger share of total production incites the ire of the union, it may not be worthwhile to try.

That this "great compression" is found all across the North Atlantic economies makes me tend to put more weight on the political-economic than on the supply-and-demand explanations. But perhaps different supply-and-demand explanations bore more of the load in different countries.

### 16.2.2.3: Social Insurance

The third component of the post-World War II Keynesian settlement in the United States was the welfare, or social insurance, state. From a western European perspective the American social insurance state was anemic. A typical post-World War II British conservative like Margaret Thatcher found the absence of state-sponsored medical care in the United States appalling, and even barbarous. And in general means-tested programs for the poor also turned out to be significantly less generous in the United States than in western Europe: the American social insurance state did less leveling than did the European. Food stamps to subsidize diet, Aid to Families with Dependent Children to provide single mothers with some cash—but that program disappeared under President Clinton in 1994—and a small and rationed amount of low-quality public housing made up America's effort to give the poor additional purchasing power in the first post-World War II generation.

That the Great Depression was the major impetus for America's leftward shift from a *laissez-faire* to a more managed "mixed" economy had an impact on the form of

the post-World War II welfare state. In Europe the mixed economy had a somewhat egalitarian bent: it was to level the income distribution, as well as insure citizens against the market. In America the major welfare state programs were sold as “insurance” in which individuals on average got what they paid for. They were not tools to shift the distribution of income. Social Security made payments proportional to earlier contributions. The pro-labor Wagner Act framework was of most use to relatively skilled and well-paid workers with secure job attachments who could use the legal machinery to share in their industries’ profits. And the degree of progressiveness in the income tax was always limited.

The pro-welfare state coalition that ensured liberal political dominance in the years after World War II was focused not on working class, egalitarian but on middle class, social insurance concerns. And it was especially not focused on achieving any form of equal opportunity for discriminated-against minorities.

### **16.2.3: Western Europe Balanced on the Edge**

How is it that western Europe became more social democratic than the United States in the post-World War II period? Its internal politics had by and large swung to the right during the Great Depression. Its commitment to both political democracy and market institutions underpinning growing prosperity had been lesser than the United States for generations. And yet, somehow, in total Western Europe was more rather than less social democratic than the United States. When right-wing British politician Margaret Thatcher came to America in 1993, her conservative Republican-Party hosts expected her to denounced Democratic-Party plans for national health insurance as socialist overreach. She refused to do so, instead endorsing: “the principle that adequate health care should be provided for all, regardless of ability to pay”.

#### **16.2.3.1: The Aftermath of World War II**

In the immediate aftermath of World War II, it was not clear that western Europe would utilize market mechanisms to coordinate economic activity. Belief in the ability of the market to coordinate economic activity and support economic growth had been severely shaken by the Great Depression. Wartime controls and plans, while implemented as extraordinary measures for extraordinary times, had created a governmental habit of control and regulation. Seduced by the very high economic growth rates reported by Stalin’s Soviet Union and awed by its war effort, many expected centrally-planned economies to reconstruct faster and grow more rapidly than market economies.



Memory of the Great Depression was fresh, and countries relying on the market were seen as likely to lapse into a period of underemployment and stagnation. A not uncommon judgment was that, in the words of Paul Sweezy, “the socialist sector of the world would [after World War II] quickly stabilize itself and push forward to higher standards of living, while the imperialist sector would flounder in difficulties”: history was expected to dramatically reveal the superiority of central planning. And British historian A.J.P. Taylor spoke in 1945 of how “nobody in Europe believes in the American way of life—that is, in private enterprise; or rather those who believe in it are a defeated party—a party which seems to have no more future.” Had European political economy taken a different turn, post-World War II European recovery might have been stagnant. Governments might have been slow to dismantle wartime allocation controls, and so have severely constrained the market mechanism.

Moreover, it seemed at least an even bet that the United States would withdraw from Western Europe. The U.S. government had done so after World War I, when the cycles of U.S. politics had led to the erosion of the internationalist Wilson administration and the rise to dominance of a Republican isolationist Congress. The same pattern appeared likely after World War II: Republican Congressional leader Robert Taft, the dominant figure in the Senate after the election of 1946, was extremely isolationist in temperament. By all indications, the American commitment to relief and reconstruction was limited. The Truman administration was internationalist, but weak. Congressional critics called for balanced budgets. The 1946 Congressional elections were a disaster for the Democratic Party. In the first two post-World War II years the U.S. had contributed about four billion dollars a year to relief and reconstruction through UNRRA and other programs. Would that continue?

Europe after World War II was in worse economic shape than it had been after World War I. Another episode of financial and political chaos like that which had plagued the Continent following World War I appeared likely. Politicians were predisposed toward intervention and regulation: no matter how damaging “government failure” might be to the economy, it had to be better than the “market failure” of the Depression.

### **16.2.3.2: Post-World War II Western Europe in a Latin American Mirror**

There is an alternative scenario—an alternate universe—another branch on the universe’s quantum wave function, overlapping ours in space and time yet as

invisible to us in the sense that a radio tuned to 99.7 hears that only and is oblivious to 104.5—that saw the maintenance and expansion of wartime controls in order to guard against substantial shifts in income distribution. The late 1940s and early 1950s might have seen the creation in Western Europe of allocative bureaucracies to ration scarce foreign exchange. It might have seen the imposition of price controls on exportables in order to protect the living standards of urban working classes—as happened in various countries Latin America, which nearly stagnated in the two decades after World War II.

Consider Argentina. Before the war, Argentina had been as rich as Continental Europe. In 1913 Buenos Aires was among the top 20 cities of the world in telephones per capita. In 1929 Argentina had been perhaps fourth in density of motor vehicles per capita, with approximately the same number of vehicles per person as France or Germany. Argentina from 1870-1945 was a country in the same class as Canada or Australia. Yet after World War II, Argentina grew very much more slowly than France or Germany, rapidly falling from the ranks of the First World to the Third. Features of the international environment benefitting post-WWII Europe—the rapid growth of world trade under the Bretton Woods system, for example—offered the same potential benefits to post-World War II Argentina.

Might western Europe have followed a similar post-WWII trajectory? In Carlos Díaz-Alejandro's estimation, four factors set the stage for Argentina's relative decline: a politically-active and militant urban industrial working class, economic nationalism, sharp divisions between traditional elites and poorer strata, and a government used to exercising control over goods allocation that viewed the price system as a tool for redistributing wealth rather than for regulating the pattern of economic activity.

From the perspective of 1947, the political economy of Western Europe would lead one to think that it was at least as vulnerable as Argentina.

Indeed, in 1946-7 U.S. State Department officials wondered whether Europe might be dying—like a wounded soldier who bleeds to death after the fighting. State Department memoranda presented an apocalyptic vision of a complete breakdown in Europe of the division of labor-between city and country, industry and agriculture, and between different industries themselves. The war had given Europe more experience than Argentina with economic planning and rationing. Militant urban working classes calling for wealth redistribution voted in such numbers as to make Communists plausibly part of a permanent ruling political coalition in France and Italy. Economic nationalism had been nurtured by a decade



and a half of Depression, autarky and war. European political parties had been divided brutally along economic class lines for two generations.

Certainly after World War I western European growth had proceeded poorly—even more poorly than Argentinian growth after World War II. The recovery of coal production after World War I was erratic. Coal production declined from 1920 to 1921, falling to 72 percent of 1913's level as a result of the deflation imposed on the European economy by central banks that sought the restoration of pre-WWI gold standard parities. Coal production fell again in 1923-1924, when the French army occupied Germany's Ruhr valley because reparations were not being delivered fast enough. And coal production fell in 1925-26, when austerity's pressure to lower wages on Britain's coal producers, and triggered first a coal and then a brief general strike.

Post-WWI Europe had seen the recovery of output repeatedly interrupted by political and economic “wars of attrition” between contending classes and interests. How could such class “wars of attrition” be avoided and political compromise attained. And if it had happened that such such class wars had once again become the rule rather than the exception after WWII, was it not likely that western Europe would vote to join Stalin's empire, and then not hold a real vote again for a long, long time?

### **16.2.3.3: Europe Reaches a Good Equilibrium**

Yet Europe avoided these traps. By 1949 national income per capita in Britain, France, and Germany had recovered to within a hair of pre-war levels. By 1951, six years after the war and at the effective end of the Marshall Plan, national incomes per capita were more than 10 percent above pre-war levels. Measured by the yardstick of the admittedly imperfect national product estimates, the three major economies of Western Europe had achieved a degree of recovery that post-World War I Europe had not reached in the 11 years separating World War I from the Great Depression.

No central bank or government pursued monetary orthodoxy so aggressively to roll back price and wage increases and preserve the real wealth of rentiers. Struggles over the distribution of income and wealth in “wars of attrition” were less virulent, in large part because memories of the disastrous consequences of the aggressive pursuit of redistributational goals during the interwar period made moderation appear more attractive to all. French, Italian, Low Countries, and West German growth during the post-World War II boom raised national product per capita at

rates that far exceeded pre-World War II, pre-1929, or even pre-1913 trends. “Supergrowth,” Charles Kindleberger has termed it.

Western Europe’s mixed economies built substantial redistributional systems. But they built these systems on top of and not as replacements for market allocations of goods and factors. Though there was support for the restoration of a market economy in Western Europe, it was far from universal. Wartime controls were viewed as exceptional policies for exceptional times, but it was not clear what was to replace them. Communist and some Socialist ministers opposed a return to the market. It was not clear when, or even if, the transition would take place. Yet it did.

Post-World War II Europe was very far indeed from *laissez faire*. Government ownership of utilities and heavy industry was substantial. Government redistributions of income were large. The magnitude of the “safety nets” and social insurance programs provided by the post-World War II welfare states were far beyond anything that had been thought possible before World War I. But these large welfare states were accompanied by financial stability, and by substantial reliance on market processes for allocation and exchange.

## **16.2.4: The Western Alliance**

### **16.2.4.1: The Marshall Plan**

It is easy to reach the conclusion that western Europe’s success was due to the U.S. administrations of Franklin D. Roosevelt and Harry S Truman. Hobbled inside the United States by a sometimes recalcitrant congress, the U.S. executive from 1945-1952 somewhat strangely found itself with more power outside. First, it ran the occupations of Japan and the bulk of west Germany. Post-World War II relief, offers of military cooperation and support against potential Soviet expansion, large-scale loans, and access to U.S. markets for European exports were all made available to western European countries that shaped their post-World War II policies in ways that gave the U.S. administration confidence.

Within two years after the end of the war it became U.S. government policy to build up Western Europe politically, economically, and militarily. The Truman Doctrine inaugurated the policy of “containment” of the Soviet Union. Included in the Doctrine was a declaration that containment required steps to quickly regenerate economic prosperity in Western Europe. And as columnist Richard Strout wrote, “one way of combating Communism is to give western Europe a full dinner pail.”

Employing Secretary of State George C. Marshall's reputation as the architect of military victory in World War II, conservative fears of the further extension of Stalin's empire, and a political alliance with influential Republican Senator Arthur Vandenberg, Truman and his administration outflanked isolationist and anti-spending opposition and maneuvered first the Truman Doctrine, then the Marshall Plan, and then an open-ended commitment through NATO to the defense of Europe through Congress.

Why was the plan named not for the U.S. president, Harry S Truman, but for his Secretary of State George C. Marshall. Why named after a Secretary of State? Truman put it best: "Can you imagine [the plan's] chances of passage in an election year in a Republican [majority] congress if it is named for Truman and not Marshall?"

The Marshall Plan was a large multi-year commitment. From 1948 to 1951, the U.S. contributed \$13.2 billion to European recovery. \$3.2 billion went to the United Kingdom, \$2.7 billion to France, \$1.5 billion to Italy, and \$1.4 billion to the Western-occupied zones of Germany that would become the post-World War II *Bundesrepublik*. Figure 1% of United States national income as a flow. Figure 3% of western European national income.

Marshall Plan dollars did affect the level of investment: countries that received large amounts of Marshall Plan aid invested more. Eichengreen and Uzan (1991) calculate that out of each dollar of Marshall Plan aid some 65 cents went to increased consumption and 35 cents to increased investment. The returns to new investment were high. Eichengreen and Uzan's analysis suggests that social returns may have been as high as 50 percent a year: an extra dollar of investment raised national product by 50 cents in the subsequent year. Another channel through which Marshall Plan aid stimulated growth was by relaxing foreign exchange constraints. Marshall Plan funds were hard currency in a dollar-scarce world. After the war, coal, cotton, petroleum, and other materials were in short supply.

But these direct effects are small potatoes. Marshall Plan aid plausibly boosted investment by only 1%-point of GDP. Even if concentrated on relieving the tightest bottleneck, such a commitment over three years can hardly be thought to have boosted western European's productive potential by more than 1%. Yet western Europe's post-WWII growth exceeded expectations by at least ten times that, and did so for three decades in a row.

### **16.2.4.2: Indirect Effects**

Perhaps it was the political-economic effects that were dominant. Marshall Plan aid was preconditioned on successful financial stabilization. Each recipient had to sign a bilateral pact with the United States. Countries had to agree to balance government budgets, restore internal financial stability, and stabilize exchange rates at realistic levels. Internal price stabilization after World War II followed shortly after the announcement of the Marshall Plan, and in total took four years, the German hyperinflation took place in the sixth year after the end of World War I, and France's post-World War I inflation lasted for eight years.

Financial stabilization required balanced budgets. Balanced budgets required successful resolution of distributional conflicts. Here the Marshall Plan provided a very strong incentive. It gave European countries a pool of resources that could be used to cushion the wealth losses sustained in restructuring, and to sooth disappointed expectations from groups of labor and capitalists and landlords who thought they were not getting their proper shares of the pie. Marshall Plan administrators with one hand pressured European governments and interest groups to compromise, and furthermore to decontrol and liberalize their economies in a more "American" mold even when they wished to do otherwise. With the other hand they offered resources.

The resources did not obviate the need for sacrifice. But it increased the size of the pie available for division among interest groups. 3%—Marshall Plan aid as a share of recipient GDP—was not an overwhelmingly large change in the size of the pie. But if the sum of notional demands by interest groups that thought they were not getting their fair share happened to exceed aggregate supply by 6% percent, Marshall Plan transfers could reduce the sacrifices required of competing distributional interests by a half.

Perhaps a sizeable part of the credit for Europe's successful post-WWII reconstruction belongs to acts of statesmanship: the Marshall Plan and other initiatives that sped Western European growth by altering the environment in which political and economic policy was made. The Marshall Plan era saw the creation of the social-democratic "mixed economy": the restoration of price freedom and exchange rate stability, and the reliance on market forces within a context of a large social insurance state, some public ownership of industry and utilities, and a great deal of public demand management.

## **16.3: “Supergrowth”**

### **16.3.1: Western Europe**

Boom in the 1950s and 1960s the western European economies certainly did.

Even the most casual glance at numbers and growth rates reveals that growth and recovery after World War II was astonishingly rapid. Considering the three largest Western European economies—Britain, France, and Germany—the Second World War inflicted much more damage and destruction on a much wider area than the First. And (except for France) manpower losses were greater in World War II as well. The war ended with 24 percent of Germans born in 1924 dead or missing, and 31 percent disabled; post-war Germany contained 26 percent more women than men.

Yet the pace of post-World War II recovery soon surpassed that seen after World War I. By 1949 average GNP per capita in the three large countries had recovered to within a hair of its pre-war level, and in comparative terms recovery was two years ahead of its post-World War I pace. By 1951, six years after the war, GNP per capita was more than ten percent above its pre-war level, a degree of recovery that post-World War I Europe did not reach in the eleven post-World War I years before the Great Depression began. What post-World War II Europe accomplished in six years had taken post-World War I Europe sixteen.

The restoration of financial stability and the free play of market forces launched the European economy onto a more-than-two-decade-long path of unprecedented rapid growth. European economic growth between 1953 and 1973 was twice as fast as for any comparable period before or since. The growth rate of GDP was 2 percent per annum between 1870 and 1913 and 2.5 percent per annum between 1922 and 1937. In contrast, growth accelerated to an astonishing 4.8 percent per year between 1953 and 1973, before slowing to half that rate from 1973 to 1979.

Moreover, the post-World War II recovery did more than just rapidly restore Western Europe to its previous peacetime long-run growth path. French and German growth during the long-post World War II boom carried total production per capita to levels that far outstripped their economies’ pre-1929 or even pre-1913 growth trends. In both France and West Germany labor productivity had outstripped their pre-1913 trends by 1955, and thereafter saw no noticeable slackening of growth. The dynamic of western European growth after World War II is an order of magnitude stronger than had hitherto been seen.

### **16.3.1.1: The Transformation of West Germany**

Consider, as an example, the west German economy. Recovery in the 1940s can be understood as recovering the productive capacity that had existed before the war, with the added benefit of an extra decade and a half's worth of technology. But the German economy in the 1950s crashed through the output-per-capita levels that would have been projected by someone connecting pre-World War II peaks, and has come to rest since 1973 at about its pre-1913 growth rate, at a level of output-per-capita some forty percent higher than projected from pre-World War II experience. The magnitude of the boom came as a surprise to the Germans. The real value of a basket of German stocks multiplied eightfold during the 1950s. Unemployment in 1950 was ten percent. By 1960 it was down to one percent of the labor force. This reduction of unemployment from double-digit levels to zero-digit levels took place with no sign of inflation or excess demand pressure at all: the average inflation rate from 1949 to 1970 was 1.7 percent per year. And this reduction of unemployment did not trigger anything like the degree of labor strife that had characterized pre-World War II (and pre-World War I) Germany.

### **16.3.2: The Moderation of Europe's Business Cycle**

Europe's rapid growth in the 1950's and 1960's was associated with exceptionally high investment rates. The investment share of GNP was nearly twice as high as it had been in the last decade before World War II or was again to be after 1972. Accompanying high rates of investment was rapid growth of productivity. Even in Britain, the laggard, productivity growth rose sharply between 1924-37 and 1951-73, from 1 to 2.4 percent per annum. This high investment share did not, however, reflect unusual investment behavior during expansion phases of the business cycle. Rather, it reflected the tendency of investment to collapse during cyclical contractions and the absence of significant cyclical downturns between 1950 and 1971—and after 1973,.

Since most post-World War II recessions—on both sides of the Atlantic—have been generated by central banks fearing that rising wages and prices will set off a destructive inflationary spiral (or responding too late to such a spiral already in progress), one place to look to understand the absence of European recessions between 1950 and 1971 is at the labor market. What created such “labor peace,” such a combination of full employment with very little upward pressure on wages in excess of productivity gains?



A conventional explanation, following Kindleberger (1967), is elastic supplies of underemployed labor from rural sectors within the advanced countries and from Europe's southern and eastern fringe. Elastic supplies of labor disciplined potentially militant labor unions. Another explanation is "History." Memory of high unemployment and strife between the wars served to moderate labor-market conflict. Conservatives could recall that attempts to roll back interwar welfare states had led to polarization, destabilizing representative institutions and setting the stage for fascism. Left-wingers could recall the other side of the same story. Both could reflect on the stagnation of the interwar period and blame it on political deadlock. With a labor movement—and management organizations—more interested in raising productivity rather than in redistributing income, better strategy seemed to be to push for productivity improvements first and defer redistributions to later.

## **16.3.2: Global Bretton Woods**

### **16.3.2.1: Building the International Monetary System**

International monetary disorder—financial crises, devaluations, hyperinflations, trade restrictions for balance-of-payments reasons—had been a principal obstacle to recovery after World War I. The international monetary system has relatively little role in the history-of-events of the generation after World War II because not much went wrong: another example of the principle that "happy is the land that has no history."

When the delegations—the American delegation headed by Treasury Assistant Secretary Harry Dexter White, the British delegation headed by John Maynard Keynes, and the other delegations—met in the somewhat faded and substantially under-plumbed mountain resort of Bretton Woods, New Hampshire, to build a post-WWII international monetary system, their minds were focused on what they saw as the lessons of the interwar period.

Keynes and White drew somewhat different lessons from the interwar period.

Keynes looked forward to a world in which countries could change their exchange rate parities relatively freely, and foresaw the application of trade and exchange restrictions in order to keep the requirements of the balance of payments from interfering with the pursuit of full employment. He looked to an International Monetary Fund that would provide extensive balance-of-payments financing ("subject to increasingly demanding conditionality and penalty interest rates" imposed on both trade-surplus and trade-deficit countries).

White, by contrast looked forward to a world of free capital flows and fixed and rarely-adjusted exchange rates. In White's conception, countries would be allowed to change their exchange rates only if the IMF permitted it.

The Bretton Woods system that they wound up constructing departed from the gold standard in three interlinked ways:

1. Exchange rates were fixed and pegged, but the pegs were adjustable in response to "fundamental disequilibrium." The idea was to avoid a situation like that of Britain in the late 1920s, when either devaluation or deflation is called for, and adherence to the rules of the game of the gold standard would force deflation and a prolonged depression.
2. Countries were allowed to adjust their currencies by up to ten percent—after consulting with the IMF—in cases of "fundamental disequilibrium," although larger changes were supposed to wait upon formal IMF approval.
3. Controls on international capital flows were explicitly allowed: Keynes and White had no desire to see international speculators move exchange rates and upset governments' policies.

### **16.3.2.2: The International Monetary Fund**

The International Monetary Fund was established to be a referee. Countries were supposed to maintain fixed exchange rate parities vis-a-vis one another. But when one country ran a persistent balance of payments deficit that threatened to exhaust its reserves, it could borrow from the IMF. The IMF would extend financial support to countries that needed more reserves to ride out a temporary balance-of-payments deficit. But the IMF would also be the judge of whether "fundamental disequilibrium" existed—and thus of whether exchange rate pegs should be changed, and whether policies or the level of the exchange rate needed to be changed to restore balance.

The Bretton Woods pegged the dollar to gold at \$35 a (troy) ounce, and pegged other currencies to the dollar. As long as American policy makers' commitment to the Bretton Woods parity remained firm, limits were placed on the extent of inflationary policies. As long as European policy makers were loath to devalue against the dollar, limits were placed on their policies as well. Price expectations were stabilized. Inflation, where it surfaced, was more likely to be regarded as transitory. Consequently, increased pressure of demand was less likely to translate



into higher prices than into higher output, and higher employment—as long as the system held.

The system held—barely. The Bretton Woods system did not work as designed. Even from the beginning the idea of an adjustable peg proved to be, as Eichengreen puts it, an “oxymoron.” Moreover, the IMF’s ability to oversee what was going on and to pressure countries to adopt system-stabilizing policies soon proved very limited. And the IMF’s resources were always much too small.

### **16.3.2.3: The United States as Sea Anchor**

It may have been the United States as stable sea-anchor that made the difference. It was the key country. Had it turned deflationary, then the fixed-parity rules of the Bretton Woods system would oblige other countries to turn deflationary as well. Had it turned inflationary, then the fixed-parity rules of the Bretton Woods system would oblige other countries to turn inflationary as well. The fact that other countries pegged their currencies in terms of the dollar meant that there was no substitute for stability at the core. Fortunately, for the first post-World War II generation—up until 1970, say—American economic policy produced a reasonably stable economy. With the exception of the shock of the Korean War, inflation was low. Fluctuations in unemployment were kept within moderate bounds.

To a substantial degree, this was because all parties and economists were terrified lest the Great Depression return. To fight off this possibility, politicians and economists paid very close attention to the lessons of the Great Depression and of the New Deal, which were seen as roughly three: (1) unemployment is the disease; (2) high demand is the medicine; (3) the federal government—though loose monetary policy and deficit spending—is the doctor.

Was the relative stability of the American economy up until 1970 more than simply a matter of good luck? The only answer I can give is a firm “maybe.” Recessions became rarer (although not shorter). Overwhelmingly compared to the 1916-45 (“interwar”) period, and substantially compared to the 1886-1915 (“prewar”) period, there was a reduction in the share of the time that the economy has spent in recession.

But the major improvement in performance stemmed from the fact that the post-World War II era saw no repetition of anything like the Great Depression of the 1930s—until 2008.

### **16.3.3: Technology, Trade, and Organization**

#### **16.3.3.1: Freer Trade**

The General Agreement on Tariffs and Trade was a stopgap that grew up when the institution envisioned at Bretton Woods, the International Trade Organization, failed to be born, was. It established general rules-multilateralism and non-discrimination-that meant that trade liberalisation for one would become trade liberalisation for all, and established, for the first time, an ongoing institution dedicated to the reduction of barriers to trade throughout the world. It was very successful. The average tariff imposed by the United States declined by nearly 11/12 over the 33 years from the Geneva Round of 1947 to the Tokyo Round of 1974-79. From 1953 to 1973, world real GNP grew at an average rate of 4.7 percent, and world trade at a rate of 7.5 percent per year.

The post-World War II industrial world was populated by a large number of firms making differentiated products, and then selling these products worldwide. The added scope of the market allowed for a greater division of labor, and here—in consumers’ choice certainly, and in productivity possibly—was a major gain from trade. World trade became not the exchange of coffee for washing machines, but the exchange of small cars for large cars, or of high-priced silks for moderate-priced synthetics.

#### **16.3.3.2: Technological Diffusion and Multinational Enterprises**

As the first post-World War II generation turned into the second, and as industries in the industrial core became more and more mechanized—more and more characterized by “mass production”—they should have become more and more vulnerable to foreign competition from other, lower wage countries. If Ford could redesign production so that unskilled assembly line workers do what skilled craftsmen used to do, why couldn’t Ford also-or someone else-redesign production so that it could be carried out by low wage Peruvians or Poles or Kenyans rather than by Americans, who are extraordinarily expensive labor by world standards?

Industries did migrate from the rich industrial core to the poor periphery. But in the first post-WWII generation or two they did so surprisingly slowly. One reason was added risk: political risk of all kinds tends to make investors wary of committing their money in places where it is easy to imagine political disruptions from the left or the right. Moreover, there were substantial advantages for a firm in keeping production in the industrial core, near to other machines and near other factories

making similar products. It was much easier to keep the machines running. A reliable electric power grid was much more likely to be found in the industrial core. And so were the services of specialists needed to fix the many things that can go wrong—minimum efficient scale for an industrial civilization can be far larger than the apparent minimum efficient scale for a plant.

These factors were an order of magnitude more important for industries that are in technological flux than for those that have a settled, relatively unchanging technology. A principal advantage of locating near the firms that make your machines came from the interchange and feedback of users and producers—feedback that is valuable only if designs are still evolving. And the principal advantage of a machine-knowing and relatively well-educated labor force was the ability to adapt to using slightly different machines in somewhat different ways—once again, valuable only if small changes are constantly being made.

As industries reached technological maturity, freeze their production processes into set patterns, and become businesses in which sales are made on the basis of the lowest price, they did tend to migrate to the periphery of the world economy: handed down to poorer countries as, in the words of a Japanese development advisor, older siblings hand down to younger ones clothes they no longer need.

And all this was to change later on, as the world economy entered the post-1990 age of value chains.