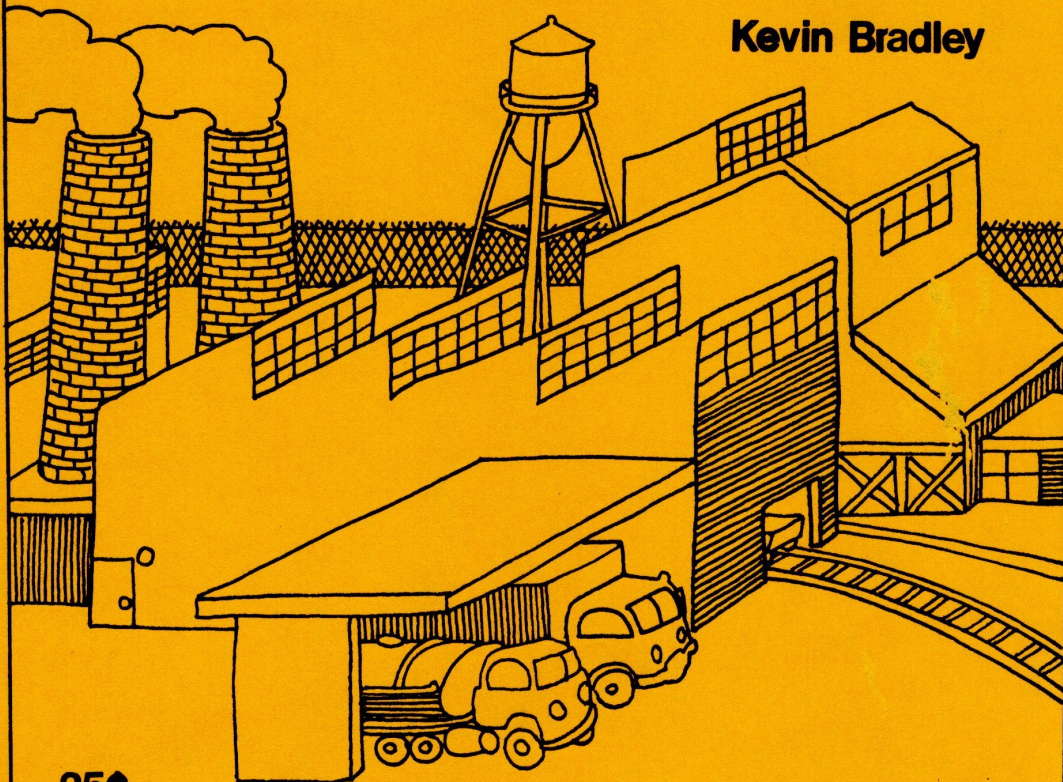


# DEVELOPMENTS IN POST-WORLD WAR II CAPITALISM

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INTERNATIONAL SOCIALIST DISCUSSION ARTICLE

POST WWII ECONOMIC EXPANSION

A Discussion Document  
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## POST WWII ECONOMIC EXPANSION

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Has production in the advanced capitalist countries significantly passed the level preceeding the destruction of World War II? How does the Post War growth compare to previous periods in capitalist history? Was there a pseudo-prosperity simply built on the ashes of destruction; or did the new output significantly increase on a per capita basis, surpassing the growth in population and enabling a significant increase in real wages if the working class fought for it?

1913, the year preceeding the outbreak of the first World War, was definitely the high point of production for the advanced capitalist countries for the next several decades. Germany, defeated in the war, had an output only 90% of its 1913 level by 1926, and only in 1927 did it again surpass 1913, and by then the population had also grown. When the Depression hit, Germany again sank below the 1913 level. Only with the rise of Hitler and the construction of a vampire economy geared for war and imperialist plunder did the German economy expand to 50% higher than the pre-World War level. England, the victor in the War, was also its economic victim. In 1926 production was 1% lower than 1913. From the War to 1929 growth averaged only 0.3% on a per capita basis and often was below the pre-war level. England was less hard hit by the world depression; so by 1938 production was 33% higher than 1913, but again population had grown. Even in the United States, output per capita grew only 1.7% a year in the "prosperous" twenties compared to 2.2% from 1870 to 1913, a period of vast industrial expansion. At the bottom of the Depression in 1933, output was only 72% of the 1929 level. By 1938, it was again only up to the 1929 level, whereas population also grew.

The Post War Period marked a sharp contrast in growth, as the following tables show.

GNP Growth<sup>1</sup>

	US	Japan	West Germany	UK	France	Italy	Canada
1870-1913	4.3%	3.3%	2.8%	2.1%	1.6%	1.4%	3.8%
1913-1929	3.1	3.9	0.4	0.8	1.7	1.8	2.4
1929-1950	2.9	0.6	1.9	1.6	0.0	1.0	3.2
1950-1960	3.2	9.3	7.8	2.7	4.6	5.8	4.0
1960-1968	4.8	11.0	4.3	3.0	3.5	5.6	5.2

<sup>1</sup>Long Term Economic Growth; Statistical Abstract, p. 306

GNP Growth Per Capita<sup>2</sup>

	US	Japan	West Germany	UK	France	Italy	Canada
1870-1913	2.2%		1.7%	1.2%	1.4%	0.7%	2.0%
1913-1929	1.7		0.0	0.3	1.8	1.2	0.7
1929-1950	1.7		0.7	1.2	0.0	0.3	1.8
1950-1960	1.5	8.1	6.0	2.5	3.7	5.2	1.3
1960-1968	3.4	9.8	3.3	2.3	4.3	4.6	3.3

Great Britain was already in an industrial slump from the 1870's to the 1890's following the heyday of her industrialization and the new challenge of Germany and the US. From 1870 up to World War I was the period of massive industrial growth for the US, Germany and Japan. Yet the Post-War Period equals or surpasses that period, both on a total output basis and on a per capita basis. Lest anyone think that the Post War GNP figures include military and other waste and are therefore not an accurate measure of output per capita, this makes no difference for the growth rate of output. If waste production remains roughly the same proportion from year to year, the change in GNP from year to year is the same as that of GNP less waste, or gross productive product, from year to year.

Not only has output and output per capita grown faster in the last 20 years than for any period in the last hundred years, so has productivity, as the following table shows.

Output Per Employee<sup>3</sup>

	US	Japan	West Germany	UK	France	Italy	Canada
1870-1913	1.9%		1.6%	1.0%	1.4%	0.8%	1.7%
1913-1929	1.5		-0.1	0.4	2.0	1.5	0.7
1929-1950	1.7		1.2	1.1	0.3	1.0	2.0
1950-1960	2.1	6.9%	5.9	1.9	4.8	4.7	2.1
1960-1968	2.9	9.3	4.4	2.6	4.7	6.3	2.2

Here the data is on an all-employee basis. But the same rate of change holds on an output per production worker basis as long as the proportion of production workers to all employees stays relatively the same over the years. This it does. US manufacturing production workers were 82.7% of all employees in 1948 and 72.3% in 1972, as more non-production workers were added over the years. Since productivity measured as output/production-worker-man-hours compared to output/all-worker-man-hours has a smaller and relatively declining denominator, the above figures on productivity slightly underestimate the productivity growth in more recent years.

<sup>2</sup>Long Term Economic Growth; Statistical Abstract, p. 306.

<sup>3</sup>Long Term Economic Growth, Part IV, Table 7, Statistical Abstract, p.

In the US production grew rapidly during World War II, but also declined by 10.7% by 1946 with demobilization compared to the height of 1944 war production. Not until the outbreak of the Korean War in 1950 did production again reach the 1944 level, and from then on the direction was up. Production figures are not available for the World War II period for England, but in 1947 production was 8% higher than the 1938 pre-war level and historic peak. Japan was not affected by the World Depression, and reached a peak in 1939. Its war economy was at a 7% lower level, and defeat in the war brought it to a level only 56% of its 1939 peak. But by 1954 Japan had surpassed that peak and has accelerated extremely rapidly ever since to become the fastest growing national economy in capitalist history, becoming the second biggest capitalist country in 1965 as it passed Germany, and rising from an output level of 11% of the US in 1950 to 37% in 1971. For Germany, no figures are available for World War II, but after the massive destruction its level in 1948 was 74% of its 1938 historic peak. But in ten short years with massive Marshall Plan aid it had surpassed its 1938 level, and has also grown rapidly since.

From 1950 to 1970 the US doubled its output, England's increased by 1.8 times, Canada's by 2.5 times, France's by 2.7 times, Italy's by 3.1 times, and Germany's by 3.8 times. These are levels reached after these countries had overcome the effects of wartime destruction. Japan, the most devastated during the war, did not recover until 1954. From then until 1970 its economy has grown 4.7 times.

We need to have some basis of comparison for the output of one country to another to measure economic growth in the advanced capitalist countries as a whole. Unfortunately, we cannot just multiply GNP in the various national currencies by the official exchange rates. As the recent devaluation has shown, currencies may be over or under value considerably, and it should be clear that a 10% change in the dollar vis-a-vis some other country did not suddenly make US output somehow 10% less. It is necessary to compare physical output in narrow industries from one country to another. For example, how many tons of steel does Japan produce compared to the US, how many cars in tons (since US cars are bigger), etc.? A method for comparing output and productivity for countries is outlined in an Appendix to Angus Maddison's Economic Growth in Japan and the USSR. A study by M. Gilbert and Associates done for the Common Market compares output for the European countries with the US for 1955. With the addition of a Japanese study done in 1965 quoted by Madison it is possible to compare output, productivity and output per capita for 10 countries relative to the US. (Please see table on following page.)

We can see that in 1950 the US had 54% of the output of the advanced capitalist countries, and 43% in 1970. Japan rose from 6% to 15%, still only one-third the size of the US. Great Britain dropped from 11% to 8%, while Germany rose from 7% to 11%. France's share stayed the same at 8%, while Italy's share rose from 5% to 6%. Canada has an output per capita closest to that of the US at 86%, with Germany and France near. Japan is lower at 71%. Again, Canada has a level of productivity near that of the US at 89%, due to the vast amount of US industry in that country. Germany's and France's productivity are three-fourths that of the US, while Japan's is only 56%. The reason for this is that Japan's high output is based on a higher percent of the population employed, 48.5% in 1965 compared to 38.0% in the US, 45.9% in Germany,

	Real GNP		Real GNP Per Capita		Real GNP Per Employed Citizen Productivity	
	1950	1970	1950	1970	1950	1970
Total	185.9	232.0				
US	100.0	100.0	100.0	100.0	100.0	100.0
Japan	10.9	35.5	20	71	18	56
Germany	13.4	25.1	44	83	36	74
France	14.7	19.7	53	80	46	76
UK	20.7	17.8	62	65	56	59
Italy	9.1	14.1	30	54	29	59
Canada	7.4	8.9	82	86	88	89
Belgium	3.3	3.5	58	74	47	73
Denmark	1.7	1.8	62	76	55	62
Netherlands	3.5	4.2	52	66	57	73
Norway	1.2	1.4	57	73	52	73

40.9% in France, and 47.3% in Great Britain. Further, in Japan 25.5% of the employed are in agriculture compared to a high of 17.7% for France, 3.4% for Great Britain, and 5.9% for the US. Agriculture is a low productivity industry, and pulls down Japan's output per man-hour. Japan's productive output is labor intensive; it relied upon 47 million workers in 1965 compared to 20 million in France, 26 million in Germany and Great Britain, and 74 million in the US. (Incidentally, related figures for Russia in 1965 were 44.8% of the population employed, 30.1% in agriculture, GNP at 60.6% of the US level, output per person 51.1% and output per employee - productivity 43.3%.) (Madison, p. 147) Consumption levels per person in 1965, which exclude capital investment and other non-consumption output, were: (see Madison, p. 148)

USA = 100			
Belgium	69.2	Germany	67.7
Canada	70.0	Italy	45.8
Denmark	69.9	Japan	40.6
France	68.7	Netherlands	57.7
		Norway	61.8
		UK	69.3
		USA	100.0
		USSR	38.0

Further, it is possible to compare the productivity of Japanese industries to the US. In the following table US production is shown in relation to Japan = 100.

#### 1963 US Productivity Relative To Japan = 100

All Groups	247	Iron & Steel	195
Food & Tobacco	276	Nonferrous Metals	271
Textile Mill Products	368	Fabricated Metal Products	333
Paper & Allied Products	203	Electrical Machinery	172
Chemicals & Petroleum Products	247	Motor Vehicles & Equipment	200
Rubber, Elastics, Leather	172	Miscellaneous	155
Stone, Clay & Glass	236		

(Kenzo Yukizawa, "A Comparison of Labour Productivity in Japanese and American Manufacturing Industry," The Kyoto University Economic Review, April, 1968, pp. 44.)

From 1963 to 1970 US productivity in manufacturing rose only 19.6%, while Japanese manufacturing productivity rose 125.9% (Arthur Neef, "Unit Labor Costs in Eleven Countries," Monthly Labor Review, August, 1971, p. 9.). So we get the following results:

<u>Productivity Indexes</u>		
	<u>1963</u>	<u>1970</u>
Japan	100	226
US	247	295
Ratio US/ Japan	247	131

In 1963 US manufacturing productivity was 147% greater than Japanese. By 1970, it was only 31% greater, quite a narrowing. So while overall US productivity in 1970 was 79% greater than the Japanese, with agriculture, transport, mining, the services, etc., included, in manufacturing it was only 31% greater. US productivity in 1970 was 35% greater than German, 69% greater than British and Italian, and 32% greater than French, but only 12% greater than Canadian productivity.

	<u>Productivity</u>					
	Japan <u>71/63</u>	US <u>71/63</u>	Japan <u>1963</u>	US/Japan <u>1963</u>	US <u>1971</u>	US/Japan <u>1971</u>
Food & Tobacco	136.2	130.7	100.0	276	361	2.654
Textiles	206.3	124.1	100.0	368	457	2.215
Paper	211.3	133.0	100.0	203	270	1.278
Petroleum & Chem- icals	275.4	153.0	100.0	247	378	1.373
Rubber & Leather	214.5	120.7	100.0	172	208	.970
Stone, Clay, Glass	196.0	128.6	100.0	236	303	1.546
Iron & Steel	285.6	109.2	100.0	195	2.3	.746
Nonferrous	250.8	129.9	100.0	271	352	1.404
Fabricated Metals	243.9	118.4	100.0	333	394	1.615
Electrical Mach- inery	304.7	122.9	100.0	172	211	.692
Motor Vehicles	314.9	110.7	100.0	296	328	1.042

(Japan: Quarterly Journal of Productivity Statistics, Japan Productivity Center. US: 1963 Census of Manufacturers, 1969 Annual Survey of Manufacturers, Handbook of Labor Statistics, 1972, Federal Reserve "Statistical Release.")

Further, international comparisons are available for the steel industry. In 1971 productivity in the various countries was the following percent of the US.

	<u>1971</u>	<u>US = 100.0</u>		
	<u>Japan</u>	<u>France</u>	<u>Germany</u>	<u>UK</u>
Minimum	93	66	69	47
Maximum	116	70	80	51

Changes since 1964 are quite interesting. With 1964 = 100, 1971 figures are:

	<u>US</u>	<u>Japan</u>	<u>France</u>	<u>Germany</u>	<u>UK</u>
Output	97.3	236.0	117.8	115.7	92.4
Man-Hours	90.0	100.8	79.8	84.5	83.6
Output Per Man-Hr	108.1	234.2	147.6	137.0	110.6

(Patrick C. Jockman, "Unit Labor Costs of Iron & Steel Industries in Five Countries," Monthly Labor Review, August, 1969, pp. 15-22.)

We can see that the US still led Japan in productivity for most manufacturing industries in 1971. From 2.65 times higher productivity in food and tobacco, textiles, paper, fabricated metals, pctmo-chemicals, stone, glass & glass, and nonferrous metals all had comfortable leads. Motor vehicles was only 4% ahead, and rubber and leather, electrical machinery and iron and steel were all behind Japan.

In the steel industry, Japanese productivity had caught up or surpassed that of the US by 1971. However, since 1971 US output was 2.7% lower than 1964 and the US steel industry was operating at depression levels, productivity was far from what was physically possible. In 1970 imports were 13.8% of the domestic market. In the US, France, Germany and Britain there were sizeable man-hour declines, with the US and Britain producing less than 7 years earlier. Meanwhile, Japanese production had more than doubled with the man-hours staying the same. The gain was due purely to a doubling of productivity.

#### Unemployment in the Advanced Capitalist Countries

	<u>US</u>	<u>Canada</u>	<u>France</u>	<u>Germany</u>	<u>Great Britain</u>	<u>Italy</u>	<u>Japan</u>
1959	5.5%	6.0%	2.4%	1.7%	3.1%	5.7%	2.3%
1960	5.5	7.0	2.2	.8	2.3	4.3	1.7
1961	6.7	7.1	1.9	.5	2.1	3.7	1.5
1962	5.5	5.9	1.9	.4	3.0	3.2	1.3
1963	5.7	5.5	1.9	.5	3.8	2.7	1.3
1964	5.2	4.7	1.6	.3	2.6	3.0	1.2
1965	4.5	3.9	1.8	.3	2.3	4.0	1.2
1966	3.8	3.6	1.8	.3	2.4	4.3	1.4
1967	3.8	4.1	2.3	1.0	3.8	3.8	1.3
1968	3.6	4.8	2.7	1.2	3.7	3.8	1.2
1969	3.5	4.7	2.1	.8	3.7	3.7	1.1
1970	4.9	5.9	2.2	.5	4.0	3.4	1.2
1971	5.9	6.4	2.7	.7	5.3	3.4	1.3



(1972 Handbook of Labor Statistics, p. 382. All rates are adjusted to US concepts.)

Further, we can compare absolute levels of output among the advanced industrial countries over time, as in the following table:

	<u>Size of GNP 100 = US GNP in 1950</u> ((\$285 billion 1950 dollars))							
	<u>US</u>	<u>Japan</u>	<u>West Germany</u>	<u>UK</u>	<u>Total</u>	<u>France</u>	<u>Italy</u>	<u>Canada</u>
1870	5.7 <sup>a</sup>	1.7 <sup>b</sup>	2.6	5.3	15.3			
1913	33.7	5.2	8.5	13.1	60.5			
1929	55.1	9.6	9.0	14.7	88.4			
1938	55.1	15.2	12.8	17.3	100.4			
1946	88.5	8.5 <sup>c</sup>	9.4	19.5	125.9			
1950	100.0	10.9	13.4	20.7	145.0	15	9	7
1970	203.7	72.3	51.1	36.3	363.4	40	29	18

(a) 1871 (b) 1879 (c) 1947 (d) 1948

We can see that output for the four countries in 1970 was 3.6 times the 1938 level. Further, we can compare GNP per capita in real terms with the US = 100

	<u>GNP Per Capita Real Terms 100 = US \$1,887 Per Person 1950</u>							
	<u>US</u>	<u>Japan</u>	<u>West Germany</u>	<u>UK</u>	<u>France</u>	<u>Italy</u>	<u>Canada</u>	<u>All</u>
1950	100	20	44	62	53	30	82	56
1968	152	92	111	93	112	71	121	107
Increase	1.5X	4.6X	2.5X	1.5X	2.0X	2.4X	1.5X	1.9X

We can see that although Japan's GNP per capita increased 4.6 times by 1968, it was still below the US in 1950. Although it had the second largest GNP in the capitalist world, its large population kept the output per capita below all the other advanced capitalist countries except Italy. The English speaking countries, USA, Canada and Great Britain, all had a per capita output fifty percent greater than 18 years before. They pulled the seven country average increase down to 1.9 times. The other countries' GNP per head was up 2.6 times its 1950 level.

Average real wage improvements in the advanced industrial countries were as follows for the years 1960 to 1970:

	<u>% Increase Real Wages Per Hour 1950-70</u>	<u>% Increase Real Wages Per Hour 1960-70</u>	<u>1960-70 Average Annual Percent Change</u>
US	99.4%	13.3%	1.5%
Canada	140.5	28.5	2.3
Japan	424.0	101.6	7.3
France	364.0	50.1	4.0
W. Germany	473.1	69.7	5.4
Italy	324.7	83.5	5.1
UK	148.1	36.6	2.7

(Statistical Abstract, 1971, p. 803. USDL, BLS, Unit Labor Cost in Manufacturing 1950-65; Bulletin 1518. Arthur Neef, "Unit Labor Costs in Eleven Countries," Monthly Labor Review, August, 1971. USDL, BLS, Handbook of Labor Statistics, 1971, Table 160, "Index of Consumer Prices, Selected Countries.")

These changes show increases in money wages divided by changes in the cost of living. They exclude taxation, but on the other hand they also exclude government transfer payments to working people. As indicators of change over time the real wage per hour indexes are fairly accurate.

We can see that most of the improvement in real wages came in the first post-war decade, with the averaged yearly change in the sixties similar to the growth in GNP per capita. All in all there have been sizeable improvements in real wages in the advanced industrial countries since the war, but at a slackening pace.

It is also possible to compare the post-war growth in the total capital stock with previous periods. The capital stock is made up of plant and equipment, plus inventories. The stocks' net percent depreciation is figured on a perpetual inventory basis, using average service lives for similar structures or equipment and depreciated on a straight line basis. Growth of the capital stock in the 20th Century is shown in the following table:

Cumulative Age of Gross Capital Stocks 1968

Years Old	Years Old	Years Old
1 8.9%	6 45.2%	15 79.1%
2 17.5	7 50.3	20 88.0
3 26.1	8 54.8	25 92.1
4 33.7	9 59.2	30 94.7
5 39.8	10 63.1	35 95.7

Gross stocks are before depreciation, so net stocks are younger. One-third of the gross stock in 1968 was four years old or less, 63% was ten years old or less, and 79% fifteen years or less. Of the 1948 gross stock, by 1968 76% of it had been depleted and replaced, and an additional 105% of capital had been used up and replaced.

Similar material is not on hand for foreign countries, but investment as a percent of Gross National Product is:

	<u>US</u>	<u>Japan</u>	<u>Germany</u>	<u>UK</u>	<u>France</u>	<u>Italy</u>	<u>Canada</u>
1870-79				8.0%		8.2%	
1880-89				6.1		11.3	
1890-99	20.0%			6.9		8.9	
1900-09	19.0			7.9		12.7	
1910-14	18.0			5.4		15.1	
1920-29	17.3		13.8 <sup>a</sup>	8.7		16.0	18.6 <sup>b</sup>
1930-38	12.5		12.2 <sup>c</sup>	9.1		16.1	13.5
1940-49							
1950-59	17.0	24.6	21.3	14.4	17.8	19.9	23.7
1960-64	16.6	33.4	26.7	16.6	19.9	22.7	22.1
1966-71	13.9	33.8	24.8	17.6	25.2	19.7	

(Long Term Economic Growth, Part IV, Table 10. (a) 1925-29, (b) 1926-29, (c) 1930-37.)

We can see that even Britain's investment as a percent of output is higher in the post-war period than anytime since 1870, before which no figures are available. Though the US figures have fallen, they are not bad compared to the early 20th Century for the US, Britain and Italy. Further, all countries have invested a higher proportion of their economies than before.

#### Conclusion

By every measure, output, rate of growth of output, output per capita, productivity, and investment rate, the post-war period has equalled or excelled any time in modern capitalist history since 1870. For earlier years few figures are available, but since the period of rapid industrialization of the US, Germany and Japan occurred since then, we can only conclude that the post-war period was one of significant advance of the capitalist system. There can be no question that real wages rose considerably in the advanced industrial countries. This is not to discount increasing disparities between the advanced capitalist countries and the semi-colonial countries in Africa, Asia, and Latin America. But the spur to sharp class struggle in the advanced countries was missing as prosperity laid an economic basis for reformism. Especially, compared to the period beginning with the first World War and ending with the second, when production staggered and even declined, the post-war boom has left previous economic heights way behind. There are in fact deep contradictions at work beneath this prosperity which will sooner or later tear it apart. They cannot be explored here. This paper should be sufficient to show the depth of the post-war boom clearly enough that no one can doubt it.

COMBINED AND UNEVEN DEVELOPMENT  
Kevin Bradley

The extraordinarily rapid growth of the advanced capitalist countries compared to the long term historical average for capitalism can best be explained by the theory of combined and uneven development. Those countries most hurt by the war, Germany and Japan, still retained a highly skilled labor force. They were able to rebuild rapidly investing a considerable portion of their annual product. It was not necessary for them to rebuild using plant and equipment of only a slightly higher productive level than they possessed at the end of the war. They were able to import more advanced technology from the U.S.

The U.S. retained its commanding lead in productivity due to its vastly greater investment per man, and with its possession of equipment at the highest level of known industrial technology. The other advanced capitalist countries, coming from further behind, were able to realize much greater gains in productivity.

This process is now coming to an end. As these countries approach the U.S. level of productivity, their rate of growth must slow down. Japan has already reached U.S. levels of productivity in motor vehicles, steel, electrical machinery, and rubber. From this point on its ability to raise productivity will depend increasingly on its levels of technological breakthrough, or innovation. Having a higher rate of accumulation, it can be expected that it will make these breakthroughs more rapidly than in the U.S., but at no where near the rate of growth of productivity they had before. Innovations are never introduced widely all at once. They always have a slow diffusion rate which depends on the rate of accumulation, the level of competition, and the more backward capital that will be threatened as a consequence.

GROWTH OF THE PRODUCTIVE FORCES

The starting point for understanding the health of U.S. capitalism is a study of the growth of the means of production and the labor-capital relationship. The net capital stock of plant and equipment was \$231.0 billion in 1948 (1958 constant dollars). By 1972 it was \$613.3 billion, an increase of 167%. This is a measure of the mass of capital as reflected in its price. The productivity of this capital stock rose from \$4.65 per production workman hour in 1948 to \$8.22 per hour in 1972 (1952 prices), an increase of 76.8%. Manufacturing capacity rose by 325% in the same period.<sup>1</sup> The Marxian measure of capital is the socially necessary labor time necessary to reproduce it, its exchange value. In 1948 one hour of productive labor produced \$3.05 constant dollars, by 1972 it produced \$6.26. That means it took 64.3 billion hours of productive labor to reproduce the means of production in 1948 and 101.1 billion hours in 1972, an increase in value of 57%.

This vast expansion in the means of production was due to the rapid rate of investment. Here is the growth in the means of production in the U.S. in the 20th century:<sup>2</sup>

	Net Reproducible Business Stocks 1947-49 prices	Annual Change
1900	\$108.0 billion	
1912	\$160.7 "	3.4%
1929	\$251.4	2.7%
1933	\$229.0	-2.4%

<sup>1</sup>"Alternative Estimates of Fixed Business Capital in the U.S.", Survey of Current Business, April 1970, pp. 29-30. Productivity is gross private product from the July SCB. Manufacturing capacity 1948 44.8, 1972 145.6, ERP Table C-37.

<sup>2</sup>Raymond Goldsmith, The National Wealth of the U.S. in the Postwar Period, Princeton, ABER 1962, pp. 114, 116.

1939	\$224.1 billion	-0.4%
1945	\$235.8	0.9%
1958	\$382.3	4.0%
1972	\$676.3	4.1%

The capital stock grew by 49% from 1900 to 1912, and an additional 56% from 1912 to 1929. It then declined by 8.9% by 1933 and a further 2.1% by 1939. From 1939 to 1945 it grew by 5.2%, but was still below the 1929 level, which was not surpassed until 1947. From then on it rose at the most rapid rate in the 20th century, reaching a level 2.5 times that of 1929.

The average age of plant and equipment rose as follows:

#### MEAN AGE OF PLANT AND EQUIPMENT <sup>3</sup>

1925	10.4 years	1948	9.1 years
1929	9.8 "	1955	7.7 "
1939	12.0 "	1965	7.0 "
1944	12.0 "	1968	6.6 "

The rate of growth in the other capitalist countries was even higher. From 1953 to 1965, assuming that half of the pre-existing stock was replaced, the capital stock grew 4.8% a year in France, 7.2% in W. Germany, 14.7% in Japan, 2.7% in Great Britain, and 4.5% in the U.S. (9.0% in Russia).<sup>4</sup>

In the U.S., while the fixed position of constant capital grew 16% or 4.2% a year, the total constant capital (including inventories and wages of non-productive workers, the non-variable portion of circulating capital) grew 16%, also at 4.2% a year. Meanwhile, the number of productive workerman hours grew only 18.9% or 0.8% a year.<sup>5</sup> There the technical composition of capital or the mass of means of production per man hour rose by 127% from 1948 to 1972, an increase of 3.5% a year. The level of investment and the accompanying rise in the technical composition of capital determine the level of employment in the society. Employment of productive workers rose 19% in the period, while the hours worked per year fell 3.3% from 2,097 to 2,018.

The rate of exploitation in the U.S. rose from 104.9% in 1948 to 135.9% in 1972. This is calculated from total Surplus Value, made up of corporate profits, net interest, rental income of persons, proprietors income, managers' salaries, and indirect business taxes less the proprietor's wage equivalent to the compensation of the average worker and Variable Capital, made up of the wages of productive workers. A rough idea of the differing rates of exploitation in the advanced capital countries can be seen by comparing capitalist income in manufacturing to labor income. For 1950 to 1960 the average for Germany was a 67% ratio, the same as for the year 1960. For Great Britain, the ten year average is 47%, the same as 1960. For the U.S., the ten year average is 30%, 1959 is 25%. For Japan the 1962/1963 average is 150%. Although in the U.S. only 75% of workers are productive laborers and the figure is higher elsewhere, there can be little doubt that the rate of exploitation is highest in Japan, next in Germany, and with Britain probably a little higher than the U.S.

<sup>3</sup>Survey of Current Business, "Alternative Estimates," Op. Cit.

<sup>4</sup>Angus Maddison, Economic Growth in Japan and the USSR, New York: Norton, 1969, p. 59.

<sup>5</sup>Average hours worker per year SCB, 3/72, p. 24, times percent of productive workers in manufacturing, Employment and Earnings, Table 5, times full time equivalent workers July SCB, Table 6.<sup>4</sup>

The rate of profit can be calculated as the rate of return of the mass of surplus value on the total capital. The total capital is composed of the fixed capital at current replacement costs, inventories, the wages of non-productive in one turnover period of the circulating capital and the wages of productive workers in one turn. The rate of profit then was 32.9% in 1948, rising erratically to 34.6% in 1972. When the total capital and surplus value in current dollars is converted to socially necessary labor time by dividing by output per man-hour the rate of profit stays the same.

RATE OF PROFIT - LABOR TIME (BILLIONS OF MAN-HOURS SOCIALLY NECESSARY LABOR)													
Dollars Produced Per Man- Hour of Productive Labor	Year	Fixed Capital Socially Necessary Labor Time	Inven- tories	Wages Non- Produc- tive Labor Time	Total Capi- tal	S	p <sup>1</sup>	s <sup>1</sup> %	Q	n	Growth in Fixed Capi- tal	V	
\$2.51	'48	64.3	36.1	3.9	8.3	112.6	37.0	32.9%	104.9	92.6	4.24		35.3
2.62	'49	66.3	30.8	4.0	8.4	109.6	34.7	31.6	105.2	92.3	3.92	3.1	32.9
2.73	'50	71.3	36.2	3.0	8.6	119.2	38.7	32.5	104.2	92.7	4.30	7.5	37.1
3.05	'51	71.4	36.8	4.0	9.4	121.5	39.7	32.7	110.6	92.3	3.82	0.1	35.9
3.16	'52	73.3	34.6	4.0	9.0	120.9	38.9	32.2	107.6	92.5	4.01	2.7	36.2
3.28	'53	74.3	33.6	4.2	9.6	121.6	38.8	31.9	103.7	92.1	3.91	1.4	34.4
3.46	'54	73.5	31.0	4.0	8.4	116.8	47.1	31.8	110.0	92.8	4.03	-1.1	33.8
3.64	'55	76.2	30.8	3.6	8.1	118.7	39.5	33.3	113.0	93.2	4.33	3.7	35.0
3.73	'56	82.4	32.7	4.1	8.8	127.9	39.1	30.6	107.5	93.1	4.15	8.1	36.4
3.99	'57	82.8	31.8	4.0	8.2	126.7	38.6	30.4	111.1	93.5	4.24	0.5	34.7
4.21	'58	81.2	30.6	3.9	7.6	123.3	37.2	30.2	116.0	93.8	4.21	-1.9	32.1
4.44	'59	79.6	29.7	3.5	7.3	120.1	39.6	32.9	120.0	93.9	4.53	-2.0	33.0
4.57	'60	79.9	29.6	3.5	6.9	119.9	39.3	32.8	118.6	94.3	4.81	0.4	33.1
4.79	'61	78.6	28.9	3.4	6.6	117.5	39.3	33.4	123.6	94.4	4.80	-1.6	31.8
5.06	'62	77.4	28.6	3.2	6.5	115.7	40.9	35.4	128.1	94.4	4.93	-1.5	32.0
5.45	'63	74.9	27.4	2.6	6.2	111.0	43.1	38.8	139.1	94.4	5.02	-3.2	31.0
5.49	'64	78.6	28.2	3.2	6.3	116.2	43.2	37.2	132.6	94.6	5.18	4.9	32.6
5.79	'65	80.5	29.3	3.2	6.5	119.7	45.4	37.9	136.2	94.6	5.12	2.4	33.3
6.06	'66	84.7	31.4	3.3	7.0	126.5	47.6	37.7	136.5	94.4	4.97	5.2	34.9
6.34	'67	88.4	31.4	3.5	7.1	130.4	47.4	36.4	136.5	94.6	4.93	4.4	34.7
6.76	'68	90.8	31.4	3.5	7.0	132.7	48.4	38.5	137.3	94.7	5.04	2.7	35.3
7.00	'69	96.0	33.1	3.7	7.2	140.0	48.6	34.7	130.2	94.9	5.20	5.7	37.3
7.48	'70	98.9	32.6	3.8	7.4	142.7	47.4	33.3	132.3	94.8	4.88	3.0	35.9
8.19	'71	98.5	31.3	3.5	7.0	140.3	48.2	34.3	138.8	95.0	4.95	-0.4	34.7
8.61	'72	101.1	31.5	3.4	6.9	143.0	49.5	34.6	135.9	95.2	5.25	2.6	36.4

Profits of manufacturing corporations as a percent of stockholders equity shows a decline, whereas total surplus value as a percent of total cost shows a slight increase. The difference is in net interest, which was only 1.9% of surplus value in 1948, but 9.7% in 1972. Interest is considered an expense by corporations and this is deducted from profits, but it is crucial in determining the overall profitability of the system.

The international comparison of the rate of profit yields the following results:

	Germany	Great Britain	U.S.	Japan
Average 1950-1960	27.5%	19.2%	18.1%	
1960	27.4%	17.4%	14.0%	
1962-63	—	—	—	26.3%

Further, the real annual return on capital, adjusted for the annual increase in share prices and the annual increase in the cost of living from 1955 to 1961, gives: Belgium 4.4%; France 9.6%; U.S. 9.8%; Great Britain 12.1%; Netherlands 16.8%; Italy 20.1%; W. Germany 23.7%; and Japan 32.6%.<sup>8</sup> Again Japan and Germany have higher rates of profit. The results can be seen in U.S. short term capital flows abroad.

	Profits before taxes	Stock Holders' Equity	Rate of Profit
1948	\$18.4 billion	\$12.2	25.5%
1949	14.4	77.6	18.6
1950	23.2	83.3	27.9
1951	27.4	98.3	27.9
1952	22.9	103.7	22.1
1953	24.4	108.2	22.6
1954	20.9	113.1	18.5
1955	28.6	120.1	23.8
1956	29.8	131.6	22.6
1957	28.2	141.1	20.0
1958	22.7	147.4	15.4
1959	29.7	157.1	18.9
1960	27.5	165.4	16.6
1961	27.5	172.6	15.9
1962	31.9	181.1	17.6
1963	34.9	189.7	18.4
1964	39.6	199.8	19.8
1965	46.5	211.7	18.8
1966	51.8	230.3	22.5
1967	47.8	247.6	19.3
1968	55.4	265.9	20.8
1969	53.1	289.9	20.0
1970	48.1	306.8	15.7
1971	53.2	320.9	16.6
1972	63.3	344.1	18.4

ERP, Table C-74

<sup>7</sup>. Ibid.

<sup>8</sup> Economic Growth in the West, p. 55.

Stockholders Equity is based on cumulative historical investment which does not take account of inflation. On the other hand, it underestimates fixed assets because of rapid depreciation for income tax purposes. Due to the large percentage of assets that are circulating capital valued at or near current prices return on stockholders equity is a close measure of profitability. George Stigler, Capital and Rates of Return in Manufacturing Industries, shows profits measured on book values slightly underestimate the rate of profit in all manufactures. Table A-59.

#### JAPANESE ECONOMIC GROWTH

Japan had the most sustained economic growth in the Post War Period, rising to be the second largest capitalist country. The basis for this is that Japan invests one-third of its product each year, the highest proportion in capitalist history. Capital inputs grew at 14.7% a year, and labor inputs by 3.8% a year (In W. Germany, which had the next highest economic growth, these inputs grew at 7.2% and 2.5% respectively). Japan could broaden its capital base by pulling in new workers, especially from agriculture. In the United States, where the labor force grew much more slowly, most of the capital investment goes for capital deepening, the replacement of labor with capital and capital for capital when unit production costs are lower. Japan began at a much lower level of productivity, only some 18% of the U.S. level in 1950. By using more advanced technology, it was able to switch resources from agriculture, which has a low productivity, to manufacturing with a high productivity. From 1950 to 1969, Japan purchased \$1.5 Billion of technology from the U.S. in the form of licenses and royalties which had been pretested in the U.S. and developed at a cost of \$20 billion a year in Research and Development. It was able to outstrip the pace of development that, for a country, on the fringes of the highest technological level, such as the U.S., where the development of new innovations requires considerable Research and Development investment and is a break on the growth in productivity. Japan also had extremely well-trained work force, and had almost no economic waste due to arms expenditures.

The fast growing industries in Japan were chemicals, steel, shipbuilding, autos, and electronics. Most investments were concentrated there, and had large productivity gain. They were able to pay substantial wage hikes, but since productivity rose still more rapidly unit labor costs and hence prices actually dropped, the situation typical of 19th century capitalism. The slow growing industries in Japan were foods, textiles, agriculture, and the services. In most capitalist countries labor mobility and migration would have forced the capitalists in these industries to raise wages or lose their workers. As a result, their labor costs would have risen more rapidly than their productivity, their prices would have risen, leaving these industries open to import competition and a trade deficit. In fact Japanese workers rarely quit the company that hires them and mobility is low so these industries had low wages and were resistant to import competition. Most recently, inter-industry wage gaps have narrowed and Japan is becoming more vulnerable to imports. Here is the ratio of exports to GNP for the leading capitalist countries:

	Export-GNP Ratio 1965-67	Rate of Growth Real Exports 1960-67
Japan	11%	15.7%
France	14%	7.0%



Italy	12%	12.3%
Great Britain	18%	3.2%
West Germany	21%	8.4%
U.S.	6%	6.4%

Trevis Blumenthal, "Exports and Economic Growth: The Case of Postwar Japan," The Quarterly Journal of Economics, November 1972, p. 619.

But this indicates exports only as a percent of final demand. It does not tell us how exports affect the total output of an industry. For example, no pig iron may be exported, but a large amount of it may go into cars which are exported. An input-output table tells us the total import, direct and indirect, of the import of exports.

Further Japan is quite dependant on imports of raw materials including mineral ores and fuel for its industrial development. Exports developed more rapidly than the GNP as a whole and paced developments. Japan is only today reaching the full development of its home market where industrial output in some sectors only grows with the population and improvements in real wages. Previous to the saturation of the home market most sectors of industry grew at a much more rapid rate from nothing to the current day levels. Japan has moved out to replace the U.S. as the dominant trading partner of the South East Asian countries. In 1970, Japan accounted for 46% of Taiwan's imports, 42% of South Korea's, 26% of Indonesia's, 23% of Burma's, 22% of Hong Kong, 18% of Singapore, and 13% of Malaysia (New York Times, August 22, 1972).

#### SHARE OF EXPORTS DIRECT AND INDIRECT IN TOTAL OUTPUT

	<u>Japan</u>	<u>U.S.</u>
Coal and lignite	19.3%	16.1%
Iron ores	36.1%	16.7%
Nonferrous ores	28.5%	12.5%
Tobacco	0.5%	8.1%
Apparel	13.4%	2.3%
Wood Products	8.4%	5.9%
Furniture	3.9%	0.9%
Paper	5.9	9.3%
Leather	17.4%	5.9%
Rubber products	28.7%	7.2%
Basic chemicals	25.9%	15.8%
Petroleum Products	14.0%	7.1%
Pig iron, sterilized	36.6%	
Basic iron & steel products	32.6%	9.0%
Basic nonferrous metal products	27.9%	11.4%
Metal Products	12.0%	7.5%
Machines	14.1%	15.7%
Electrical machines	18.8%	10.2%
Transport Equipment	21.2%	7.9%
Precision instruments	22.6%	10.3%
Transportation	14.0%	11.4%

Japan, Ibid, p. 621; U.S.: Charles T. Bowman, "Report on Employment Related to Exports," Monthly Labor Review, June 1969, p. 17. Metal products, machinery, and transport equipment are weighted averages with employment used as the weights.

## THE ROLE OF PROFIT IN THE U.S.

The Arms Economy has prevented the recessions from developing into depressions in the Post War Period. At the same time by preventing massive deflations (drop in prices) and the destruction of capital through abandonment, underutilization and devaluation as occurs in a depression, it was possible for the system to reach ever new heights of capital accumulation. Investment occurred at the highest rate in the U.S. in the 20th century. The mass of capital rose by 165% in use values in the Post War period, but since productivity rose in the same period by 77% the socially necessary labor time to replace the capital stock rose by some 57%, the increase in its exchange value.

The rate of profit in the U.S. in the postwar period stayed essentially the same. The rate of profit according to Marx can be expressed as  $p^l = ns^l(1-Q)$  where  $p^l$  is the rate of profit  $p^l = \frac{S}{C+c+v}$ .

$S$  is surplus value, profits, interest, and rent, made in one year.  $C$  is the fixed capital, the current replacement cost of all plant and equipment, and represents inventories and wages of non-productive workers. Inventories are used up  $n$  times a year, the number of turns of the circulating capital. The wages of non-productive workers and of productive workers are used up at the same rate as the inventories. (For example, if a ship yard builds three ships a year, the wages that the capitalist lays out, just like raw materials and semi-furnished parts, are tied up until a ship is sold. In this case the number of turns a year is 3. The variable capital, the wages of productive workers the capitalist has to have on hand at one time is equal to the total wages of productive workers spent in a year divided by 3.)  $s^l$  is the rate of exploitation or the rate of surplus value.  $\frac{S}{v}$ , where  $s$  is the surplus value in one turn and  $v$  the variable capital in one turn,  $Q$  is the organic composition of capital  $Q = \frac{C+c}{C+c+v}$ . This represents the constant portion of the total capital.  $1-Q$  then can be expressed as  $\frac{C+c+v}{C+c+v} - \frac{C+c}{C+c+v} = \frac{v}{C+c+v}$ .

$\frac{ns}{v} = \frac{S}{v}$ , so  $p^l = \frac{S}{v} \left( \frac{v}{C+c+v} \right) = \frac{S}{C+c+v}$  which proves the formula. Profit in other words is only made off of the variable capital  $v$ .  $1-Q$  expresses the ratio of variable capital to total capital  $\frac{v}{C+c+v}$ . The bigger the

organic composition of capital, the constant portion of the total capital, the less the variable portion of capital, the portion surplus value can be made off of. Then if the rate of exploitation stays the same, a higher organic composition of capital means less variable capital in the total capital and thus with a fixed rate of surplus value, a lower rate of profit on the total capital. If the organic composition of capital is kept the same, the rate of profit varies according to changes in the number of turns and the rate of exploitation. The more surplus value the capitalist gets out of each time period worked, the higher the rate of profit. Given the same rate of exploitation, the more effectively the capitalist can use his fixed capital, the more sales on that capital, the higher the rate of profit. If the amount of surplus value grows faster than the growth in capital, the rate of profit will rise. The amount of inventories was equal to 56% of the value of fixed capital in 1948 and 33% in 1970. The capitalists used up the inventory supply 4.24 times

in 1948 and 4.88 times in 1970, as a result of technological change, quicker return on sales, etc.

The following table shows the following key determinants of the rate of profit:

	$p^1$	$n$	$s^1$	$Q$	$1-Q$
1948	32.9%	4.24	104.9%	92.6%	7.4%
1972	34.6%	5.25	135.9%	95.2%	4.8%
% of yearly change	0.3%	1.1%	1.1%	0.1%	-1.7%

Since  $p^1 = ns^1(1-Q)$ , the average change in the rate of profit from one year to another was  $(1.003)p^1 = (1.011)s^1(.983)(1-Q)$ . In the average year the rate of exploitation rose 1.1% and the number of turns by 1.1% which just outbalanced the 0.1% rise in the organic composition of capital, or the 1.7% decline in the variable portion of capital off which surplus value is made. We can conclude then that the rise in the rate of exploitation and the increased turnover of capital were enough to counterbalance the rise in the organic composition of capital and contribute to a 0.3% annual increase in the rate of profit.

How can we explain the slow growth in the organic composition of capital in relation to the highest rate of accumulation of U.S. capitalism in the 20th century. Is it because military goods, the product of the arms economy, are economic waste and do not re-enter the cycle of production as either capital goods or wages of workers? Constant capital, made up of fixed capital and the constant position of circulating capital, inventories and wages of non-productive workers, grew 4.2% a year in the post war period. Meanwhile the number of productive worker man hours grew only 0.8%. Thus the technical composition of capital or the mass of means of production per man hour rose by 3.5% a year. The value composition of capital is the mass of means of production valued in the socially necessary labor time necessary to reproduce it. Net labor productivity, that is, output of new labor of productive workers per man hour, rose 3.1% a year from 1948 to 1972. The technical composition of capital divided by output per man hour or productivity gives the value composition of capital, which rose only 0.5% a year. The hours it took to reproduce a worker's own workshop, so to speak, remained nearly constant per year, as the growth in productivity nearly kept up with the increased investment per man.

Now we can relate the organic composition of capital to the value composition of capital. We already saw that  $Q = \frac{C+c}{C+c+v}$ . We will just

use  $C$  for  $C+c$ , assimilating constant portion of the circulating capital into the fixed capital to simplify the analysis. Multiplying any number by an identity doesn't change it, so  $Q = \frac{C}{C+v} = \frac{C(\frac{1}{C})}{C+v(\frac{1}{C})} = \frac{1}{1+\frac{v}{C}}$

$$Q = \frac{C}{C+v} = \frac{C(\frac{1}{C})}{C+v(\frac{1}{C})} = \frac{1}{1+\frac{v}{C}}$$

We want to express  $\frac{v}{C}$  in terms of the value composition of capital which is  $\frac{C}{S+v}$  when C is the total constant capital in socially necessary labor time, and S+v equals the total labor of productive workers in one year. Re-arranging  $\frac{v}{C}$  and multiplying by an identity we get  $\frac{v}{C} = \frac{(S+v)}{\frac{C(S+v)}{v}}$

Now  $\frac{S+v}{v} = \frac{n(s^1+v)}{v} = n(s^1 + 1)$ . Small s is the surplus value produced in one turn, big S in a year. Substituting in,  $\frac{v}{C} = \frac{S+v}{n(1+s^1)}$  Then

$Q = \frac{1}{1 + \frac{s+v}{Cn(1+s^1)}}$  This formula expresses the organic composition of capital

in terms of the value composition of capital  $\frac{C}{S+v}$  and in turns of the number of turns n and the rate of exploitation  $s^1$ . Putting in values for 1948 we get  $Q_{48} = \frac{1}{1 + \frac{1}{\frac{R}{n(1+s^1)}}}$  We have expressed the

value composition of capital  $\frac{C}{S+v}$  as R to put it in the denomination of the equation.

$$Q_{72} = \frac{1}{1 + \frac{1}{\frac{R}{n(1+s^1)}}}$$

The total product is the

bottom denominator in 1948 (1.44)(4.24)(2.049) is 12.510; in 1972 it is (1.59)(5.25)(2.359) = 16.69, an increase of 57.4%. But R, the value composition of capital rose 10.4% in the past 25 years, n rose 23.8% and  $1+s^1$  rose 15.1%. Most of the change in the organic composition of capital in those years thus was due to an increase in the rate of exploitation and an increase in the number of turns of the circulating capital, and only lastly because of an increase in the value composition of capital. Since the value composition of capital is simply the technical composition of capital divided by net labor productivity, it is clear that the slight increase in the organic composition of capital basically did not result from the heightened technical composition of capital.

But at the same time that the increase in n and  $s^1$  raise the organic composition of capital and tend to lower the rate of profit, they also act to raise the rate of profit. For  $p^1 = ns^1(1-Q)$  or written fully

$$p^1 = ns^1 \left( 1 - \frac{1}{1 + \frac{1}{\frac{R}{n(1+s^1)}}} \right)$$

Thus n and  $s^1$  function both to raise and

lower the rate of profit at the same time. The effect of similar change in n and  $s^1$  depends on the magnitude of the value composition of capital R. But due to the nature of the formula an increase of n and  $s^1$  will definitely tend to raise  $p^1$  more than to lower it. Starting in 1972 when  $Q_{72} = .9515$ ,  $n=5.25$ ,  $s^1 = 1.359$  and  $R = 1.59$ , an increase of n and  $s^1$  by 1% each raise  $Q_{73}$  to .9523.  $1-Q$  falls from 4.85% to 4.77%, a decrease of 1.65%. Then  $p^1_{73} = (1.01)n_{72} (1.01)s^1_{72} (.9835)(1-Q_{72}) = 1.004 p^1_{72}$ . The effect of raising n and  $s^1$  by 1% each is to raise the organic composition of capital by 0.08% and at the same time raise the rate of profit by 0.4%.

It is usually not recognized that the number of turns and the rate of exploitation influence the organic composition of capital, much less have a bigger influence on it than changes in the technical and value compositions of capital. But as soon as it is recognized that the organic composition of capital  $Q = \frac{C}{C-v}$  relates the fixed capital

to the total capital including the variable portion in one turn, the connection becomes clear. The number of turns relates  $v$  to  $V$ , i. e.  $V = nv$ . The rate of exploitation  $s^1 = \frac{s}{v}$  relates  $s$  to  $v$ . Then  $n$  and  $s^1$  will be used to relate the value composition of

capital  $\frac{C}{S-v}$  to  $v$ . The reason why in the U.S. economy  $n$  and  $s^1$  are more important than

the value composition of capital in changing the organic composition of capital is because the value composition of capital changed so little as the increase in productivity almost kept up with the increase in technical composition and the organic composition of capital is measured in value terms.

The rate of exploitation is basically the result of the class struggle, but it can also be changed by what Marx called relative surplus value. This is when productivity rises more rapidly than real wages, the workers share of the total product declines and so the rate of exploitation increases. The other way the capitalists can raise the rate of exploitation is to increase the length of the work day. The work week in the U.S. for production workers in the private sector decreased, however, from 40.0 hours in 1948 to 37.2 in 1972. From 1948 to 1972 real wages rose 2.2% a year, but gross productivity or total output per man hour rose even more rapidly at 2.9% a year. Here we must consider the effective tax rate. Workers paid 17.5% of their gross income in all taxes, direct and indirect in 1948. By 1972, this rate rose to 31.9%, a drastic increase. Increases in real wages are direct results of the class struggle. Every worker knows that when money wages fall behind rises in the cost of living real wages decline. But unless money wages also rise to cover the increase in productivity and the increased tax burden, the rate of exploitation also increases. It is interesting to note that the 5.5% formula of Nixon's New Economic Policy assumes a 3.0% rate of inflation and the historical average 2.5% in productivity. This formula, would freeze the rate of exploitation, not increase it, if inflation and productivity only rose that much. The union bureaucracy for years accepted the same formula to freeze the rate of exploitation when it accepted an annual improvement factor equal to the rise in productivity and a cost of living escalator clause.

Real wages are usually expressed as money wages deflated by a consumer price index. When real wages are adjusted for taxation, the result is called spendable income. Usual government figures include only Federal income and social security taxes. We include all taxes, direct and indirect, and figure all worker income on an annual per capita basis to measure the real standard of living. When we count as income simply wage income, ignoring for the moment other labor income and health and welfare and pension benefits that the working class as a whole receives, we get the following results:

	Working Class Spendable Per Capita 1967\$	%		Working Class Spendable Per Capita 1967\$	%
1948	\$2,894		1953	\$3,170	3.7%
1949	2,937	1.5%	1954	3,185	0.5
1950	3,024	3.0	1955	3,364	5.6
1951	2,951	-2.4	1956	3,471	3.2
1952	3,057	3.6	1957	3,510	1.1

1958	\$3,526	0.5	1966	4,286	2.2
1959	3,625	2.8	1967	4,413	3.0
1960	3,643	0.5	1968	4,496	1.9
1961	3,709	1.8	1969	4,491	-0.1
1962	3,818	2.9	1970	4,575	1.9
1963	3,848	0.8	1971	4,443	3.7
1964	4,061	5.5	1972	5,172	
1965	4,195	3.3			

+78.7%      2.2% growth

Spendable income rose 42% from 1948 to 1972, at an average rate of 1.4% a year. 1967 was a high, with spendable income only surpassing that level again in 1971. For 4 years spendable income stayed the same or declined a little bit. By the end of 1972 spendable income had only risen 5.8% above the 1967 level.

However another way of figuring spendable income is to add in other labor income, health and welfare and pension payments and government transfer payments, including social security, unemployment and welfare. Then instead of figuring per capita income on the basis of those workers who are actually working we also add in the unemployed. (Retired workers are not included, but the deductions come from the checks of active workers and are paid to the retired, a redistribution of income within the working class. Just as we only figure per capita on the basis of a worker with three dependents, the per capita income can be considered a family average. A statistical average like this has no material reality. It is a conception to show us the trends.) In this case worker spendable income rose 79% from 1948 to 1972, 2.2% on a compound basis. There was only a 0.1% decline in spendable income in 1969. Transfer and other labor income was 13.2% of total working class income in 1948 and 38.7% in 1972. To ignore this tremendous addition to income would severely distort the true picture of the working class standard of living.

Bourgeois income per capita rose from \$9,269, 1958 constant dollars, in 1948 to \$18,067 in 1971, an increase of 94.9% compared to an increase of 63.9% for the working class. The average bourgeois income was 3.2 times a workers in 1948, 3.8 times a workers in 1971. So inequality between the classes continues to grow. The average figure for the bourgeoisie disguises of course the vast income disparities within the class. From the humble gas station "owner", really a tenant of some giant oil company, tottering on the verge of bankruptcy, to a Rockefeller, there is a world of difference. So we should also look at total class income. Bourgeois class income rose 144.1% from 1948 to 1971, while working class income rose 131.8%.

To complete the picture and see the class basis of consumption we have to look at luxury good consumption. The capitalist's necessary consumption is his proprietor's wage equivalent which enables him to live at the socially determined level of a worker. Anything else he consumes is luxury consumption. Taking capitalist income after taxes, the capitalist invests each year a certain sum in new capital. The amount he invests is determined by the rate of profit, and his investment decision is one of the key determinants of the system. We can find his investment from year to year by looking at the growth of the total capital in labor time, which includes fixed capital, circulating and variable capital, all of which make up net investment, and adding to this the investment that replaced capital depreciation. Replacement of depreciated capital plus net investment or the growth in total capital from year to year, represents gross investment, or the amount the capitalist lays out.

Gross investment fluctuates violently from year to year, depending on profitability, down turn in the economy, and many other social and political factors. Gross investment as a percent of cost flow after taxes varied from 48.1% in 1956 to 6.4% in 1963. In recession years it was low. Surplus value and capital consumption allowances after taxes minus gross investment equals luxury goods consumption, the necessary consumption of capitalists being the proprietary wage equivalent. Luxury consumption varied from 90% of cost flow after taxes in 1949 to 51.8% in 1950.

Actually the sizeable magnitude of capitalists luxury consumption has theoretical importance. Some revolutionaries have argued that if workers made any considerable improvement in real wages, that is, cut into the rate of exploitation, they would cut down the funds available for investment, something the capitalists would find intolerable due to the falling rate of profit, the slow down of growth in productivity and severe competition from abroad.

Marx countered the argument that rising real wages cut into investment more than a hundred years ago in Value, Price and Profit, and the argument bears repeating. Assume, Marx argued, an increase in real wages across the board, benefiting workers in all industries, such as would result from massive class struggle. The immediate effect would be to cut the rate of exploitation and thus the rate of profit, since the organic composition of capital or the turnover rate does not change abruptly also. But at the same time the new increases in real wages means a considerable increase in demand, and windfall profits are reaped by the capitalists producing consumer goods. In the capital goods and luxury goods sectors, there are depressed profits due to sharply higher labor costs. Capitalists then move their capital to the consumer goods industries where better profits can be made. As a result even capital goods are needed to build up capital investment in the consumer goods industry, so the capital goods sector is stimulated. The one area that suffers is the luxury goods sector, that did not face increased demand, because profits were cut into. The net result, according to Marx, when the system returns to equilibrium, is that there is more capital investment in the consumer goods sector, some more in the capital goods

sector and less in the luxury goods sector, which shrank proportionately during the process. Workers can enjoy the fruits of their higher real wages, according to Marx, who explains that if prices rise equally all across the board relationships do not change. Marx examines the changes in prices that accompany the sizeable wage increases, and concludes that strikes and struggles are a valid way to improve the living standards of working people, as against the arguments of Citizen Weston, who thought all real improvements for workers were impossible.

Luxury consumption made up from 24.5% of the total consumption in 1950 to 42.5% in 1963. This amount shouldn't be surprising when we consider that capitalist consumption equal to that of the average worker is necessary consumption, and that the capitalist class lives at a standard of living several times that of the average worker. In 1948 workers received 57.7% of spendable income, and bourgeois spendable income per capita was 3.0 times that of the average worker. In 1969 workers received 66.2% of the spendable income, an increase, while bourgeois spendable income per capita was 2.5 times that of the average worker. But 1969 was a year of quite high investment, with 41.4% of funds available being invested. That year luxury consumption was 24.5% of total disposable income. Luxury consumption represents that portion of surplus value left after gross investment. Since gross investment fluctuates considerably, luxury consumption does so inversely.

#### DEPARTMENTS OF PRODUCTION

The development of input-output tables enables us to determine fairly precisely the Marxian Departments of Production. These are not the same as industries such as steel or restauranting, or even broader sectors such as manufacturing or retail trade. Instead they indicate the entire sections of capitalist production producing for a common goal. For example we have seen how 33.4% of the steel industry's 1963 output went into goods ultimately destined for consumer use, while 37.1% was used in fixed capital formation, 2.3% for inventory growth, 9.4% was exported and 19.6% was used ultimately by the Government. The output destined for each of these ends makes up the steel industries contributions to the respective departments of production. The output of a given industry can show changes in the departments of production it is destined for over the years. Thus in 1965 32.2% of steel was part of the consumer goods department, but it dropped to 30.1% by 1969. Over the same years, steel going for military use rose from 5.9% of total steel production in 1965 to 6.4% in 1969. We can see that a shift of output from one department to another does not mean shifting production out of one industry (steel) into something else (e.g. aluminum), but changing destinies of products.

Using input-output tables we can find the employment in each industry that is part of each Department of Production. Again for steel in 1963, with 841,000 workers, we know that 33.4% of the output will go ultimately to consumer goods so we can say that one third of the workers or 377,000 are employed in the Consumer Goods Department. Likewise 445,000 or 39.4% are employed in the Capital Goods Department, etc. By figuring the employment in each of 80 industries according to the end use of the products we get the following results for 1965:

#### EMPLOYMENT BY DEPARTMENTS OF PRODUCTION 1965

<u>Departments</u>	<u>Total Jobs in the Private Economy</u>	
IA. Fixed Capital Goods	5,952,000	9.2%
IB. Housing and Inventory Goods	3,913,000	6.1%
II. Consumer Goods	45,607,000	70.7%
III. Exports	2,905,000	4.5%



IV. Government	6,100,000	9.5%
IVM. Military	2,500,000	3.9%
TOTAL	64,477,000	100.0%

Jobs here include both wage and salary workers, proprietors, and unpaid family workers. The Military is included as a sub-Department of the Government Department. We can see that the great bulk of employment is generated by the production of consumer goods. This says that 70.7% of all workers employed by private industry were involved in producing consumer goods, directly or indirectly. Only 9.2% were involved in capital goods production, and 3.9% for military production.

On the other hand, the 45.6 million workers producing consumer goods are kept employed by the effective demand generated by the wages earned in all four departments of production, as well as by wages earned in the Government sector. Demand for consumer goods is also generated by profits earned in the four departments that remain after taxes and new investments for capitalist necessary and luxury consumption. In this scheme luxury goods production would be a subdepartment of Department II, but is not disaggregated.

The demand generated for the output of consumer goods is roughly proportionate to the employment in the four departments. We say "roughly" because the wages in one department may be a little higher or lower than the wages in other departments. Thus for the subDepartment of War Production, it accounted for 3.9% of total private employment in 1965, but accounted for 4.9% of the wages and salaries because military created employment is concentrated in relatively high paying industries like aircraft, nonferrous metals, etc.

Further, there is a relationship between the total employment of 6 million workers in Department IA, capital goods and the level of capital goods investment in the various departments. Besides an Input-Output Table, we need the use of a Capital Flow Table. This shows the capital investment made in each industry. Thus in 1963 out of \$81 billion invested in plant and equipment, \$1.1 billion was invested in the steel industry, \$343 million in the nonferrous metals industry, etc.<sup>1</sup> In the same way we distributed employment among the Departments of Production, we can distribute new capital investment. Thus for the steel industry, since 33.4% of output belongs in Department II, Consumer Goods, so too 1/3 of the new investment of \$1.1 billion or \$281 million is investment in Department II. The results of capital investment broken down in the various Departments of Production is shown in the following table. Here Department I is shown as a whole, that is, it does not separate out fixed capital investment from inventory growth and the housing industry.

## 1963 PRIVATE SECTOR

	<u>Employment</u>		<u>Capital Investment (\$1000)</u>	
I. Gross Private Domestic Investment	7,981,000	16.2%	8,826,000	10.9%
II. Personal Consumption Expenditures	33,151,000	67.3%	61,406,000	75.8%
III. Exports	2,147,000	4.4%	3,366,000	4.2%
IV. Government	5,996,000	12.2%	7,370,000	9.1%
TOTAL	49,275,000	100.0%	80,968,000	100.0%

<sup>1</sup>Survey of Current Business, 8/ 71.

None of the output of Department I is sold to the Government, since the data is arranged that all output sold to the Government is in Department IV. So machine tools that will be used in Government armories are part of the output of Department IV. We can see that in 1963 considerably more capital went for investment in Department II than its share of the total employment, and a correspondingly less share of capital investment went to the other departments of production. The amount of investment in any industry fluctuates quite considerably with the rate of return on investment (rate of profit) in each industry, so 1963 cannot be taken as typical year of any year.

Department III Exports and Department IV Government are different in that their demand is determined outside of the system. Export demand is determined abroad and Governmental demand is determined by political decisions of the State or the nature of Government expenditures.

At this point we can clarify the relationship of the Governmental sector to the private sector. Back in 1948 24% of the net national product was paid in taxes. By 1971 33.6% was paid in taxes. In 1948 the effective tax rate on the working class was 17.5% and workers paid 38.0% of the total taxes. In that year the effective rate on the capitalists was 31.9% and they paid 62.0% of the total taxation. By 1971, workers were paying an effective rate of 32.1%, almost double, and 47.2% of the total taxation, while capitalists paid 36.4% of their income, and accounted for 50.8% of total taxation. We can see that labor's weakness in the political realm has led to a drastically higher tax burden on working people, and shifted the overall balance of taxation onto their shoulders.

From the viewpoint of the private capitalist system, the Government contributes both a drag on demand and a supplement to it. New wealth created in the private sector is removed by obligatory taxation to the extent of 30%. This cuts down considerably on what the working class has to spend, and what the capitalist gets to keep of his surplus value. In this way demand that originated in the private sector is reduced. On the other hand the wages of government workers (after they pay taxes) is available as additional demand, and government purchases of goods and services from the private sector supplement demand.

Not all the money paid in taxes returns to the capitalist sector in the forms of government workers salaries or government purchases. There is the considerable overhead of running the state: prisons, courts, administrative bureaucracy, diplomatic corps, etc. Further government expenditures return indirectly in the form of social capital and social services. Highway building and the maintenance of ports and airports are clear examples of the government collectively carrying out operations too unwieldy or expensive for private enterprise. Social services include schools, public hospitals, etc., which benefit working people as well as the capitalist class.

Conceptually it makes sense to speak of government industry, which employs Government

workers to produce for the state. By and large in the United States the Government does not sell its goods on the market but distributes them as services. They are not free of course, since they are paid for indirectly through taxation. An exception to this is Government enterprise, which on a federal level includes the Tennessee Valley Authority, and on a state and local level various transit authorities, municipal utility companies, etc. These sell to the private sector, and make what the government calculates as a profit (or loss) which returns to the Government coffers or is used to refinance the enterprise in question. Part of government enterprise are extensive armories that purchase capital equipment, raw materials and semi-finished products from the private sector to which they add the labor of government workers to make weapons for the use of the state.

The relationship between the Government and the private sector has led to considerable confusion among Marxists on the question of profit production. One school of thought argues that since military production does not re-enter the cycle of capitalist production, but instead is economically speaking waste and a drain on the system, therefore the output of the private sector sold to the government is non-productive output and does not contribute to profit production.

Military purchases make up 5 - 6% of the total demand of the private sector. But the wages of workers who owe their jobs to military generated employment make up 10% of total wages, and thus of demand for consumer goods. Further the wages of all government workers and those workers in the private sector who owe their jobs to Government purchases (workers in Department IV) make up 30% of all wages and of consumer demand. If someone wanted to argue that all sales made by military contractors were for nonproductive purposes, and thus could not embody profits, they could just as well argue that wages earned in the Military Department of Private Production were made in the course of nonproductive output, and thus the demand generated by them could not create profit, etc.

In fact the argument that no profits are created in Department IV or in the Military Goods Department is highly philosophical and spurious. It argues that military goods are waste, they do not re-enter the system, and aren't necessary. Along the same line of thinking consider luxury goods consumption. Marx delineated three Departments of Production: Capital Goods, Consumer Goods, and Luxury Goods. Luxury Goods were consumed by the capitalist, but were not necessary to keep them alive and functioning, but were a result of their ostentatious living and the consumption of surplus value which could not profitably be invested. Never did he argue that no profits were generated in Department III, although luxury goods do not re-enter the cycle of production and are as much waste economically as military production.

In the course of luxury goods or military hardware, surplus value is added by productive workers. This surplus value cannot be realized for the capitalist unless it is sold on the market. It makes no difference to the capitalist whether it is sold to the state or a non-capitalist purchaser (slaveowner, feudal lord, bureaucratic collectivist trading company) as long as he gets money which can be exchanged for commodities in return. We have already seen that the output of any industry can vary between the departments of production it is destined for according to changes in the source of demand. Yet nothing has changed in the productive process itself. Surplus value is determined in the course of production, not through the course of exchange, though it can only be realized through exchange. It is absurd to think that the same goods produced in the same way by the same workers contain surplus value when sold to a capitalist who will sell them in turn to another capitalist and finally to a consumer, but if the last capitalist sells them to the Government they no longer contain surplus value, and suddenly become non-productive.

The situation is that government industry itself is non-productive, non-profit producing. The school systems of the country, for example, do not sell their services on a market (private schools do so, however) but are run off the proceeds of taxation. Goods and services produced in government industry by government workers are not commodities since they are not sold on a market and contain no surplus value and no profit (with the exception of government enterprise, again). The assets of government industry such as machine tools, raw materials, plants, etc. are not capital since they are not used to produce surplus value. Yet the purchases by Government Industry from the Private Sector are effective demand and contribute in an important way to maintaining the level of output in the private sector and contribute to profits and wages there.

We want to measure Government and Military purchases as a percent of gross private product. We figure the latter by taking the income originating in the private sector (wages and surplus value before taxes) and adding depreciation for the year. To calculate Government purchases from the private sector we take the figures for purchased goods and services, which includes "service" from Government Industry, and subtract Gross National Product originating in General Government to get Government purchases from the private sector. From Department of Defense and Atomic Energy Commission purchases, we subtract wages of military and civilian personnel to get purchases from the private sector. (For 1948 to 1951 estimates were made using a fixed ratio derived from labor year of total government wage and salary expenses to the straight wages of military personnel).

We can see that Government Purchases from the private sector reached a high during the Korean War at 15.2%, and a second high during the Vietnam War of 13.9%. The long term trend is definitely upward. Military expenses hit a peak in 1953 during the Korean War of 10.1% of the gross private product. The Vietnam War years saw a peak of only 6.6%, less than many pre-Vietnam War years. Arms purchases from the private sector are definitely of less importance today than a decade ago. For one thing, both the Johnson and Nixon Administrations were willing to hold back on the nuclear deterrent while maintaining the Vietnam War at a high level.<sup>1</sup>

The total impact of Government spending in the creation of jobs in the public and private sector can be seen from the following table. Unfortunately the same material is not available for earlier years. The very considerable contribution of Government and Military purchases is clear, with one out of four workers working directly or indirectly for the Government.

YEAR	TOTAL JOBS CIVIL- IAN & MILITARY	GOV'T CREATED PRIVATE JOBS	GOV'T JOBS	TOTAL GOV'T CREATED JOBS	GOV'T % OF TOTAL	DOD CREATED JOBS	DOD % OF TOTAL	UNEM- PLOY- MENT	UNEM- PLOY- MENT % OF TOTAL LABOR FORCE	MILITARY
1962	72.8	6.1	12.2	18.3	25.1	6.9	9.5	3.9	5.4	2.8
1963	73.4	6.4	12.4	18.8	25.6	6.4	8.7	4.1	5.6	2.7
1964	75.0	6.4	12.8	19.2	25.6	6.3	8.4	3.8	5.1	2.7
1965	77.3	6.1	13.2	19.3	25.0	6.3	8.2	3.4	4.4	2.7
1966	80.4	6.3	14.5	20.8	25.9	7.1	8.8	2.9	3.6	3.1
1967	82.3	7.4	15.2	22.6	27.5	7.8	9.5	3.0	3.6	3.4
1968	84.3	7.8	15.7	23.5	27.9	8.1	9.6	2.8	3.3	3.5

<sup>1</sup>Richard P. Oliver, "The Employment Effects of Defense Expenditures," Monthly Labor Review, September 1967, pp. 9-16.

1969	86.6	6.6	16.2	22.8	26.3	7.6	8.8	2.8	3.2	3.5
1970	86.1	6.9	16.1	23.0	26.7	6.8	7.9	4.1	4.8	3.2
1971		6.7	16.0	22.7		6.1		5.0		2.8

Manpower Report of the President, 1972, p. 284; Patterns of U.S. Economic Growth, pp. 98-99; Projections of the Post-Vietnam Economy, 1975, p. 5.

If the unemployment situation is examined since 1948 we can see that it was at its lowest during the Vietnam War. U.S. capitalism seems to have no other method than war to keep the unemployment levels under 4.0% (Unemployment here is figured against the total labor force - civilian and military. The military employs at a poverty wage those who would otherwise be seeking jobs).

Further, we can go further and show a direct link between the cutback in arms created jobs and recession. The Nixon Administration demonstrably admitted as much in the Manpower Report of the President for 1971:

Overall, had there been no reduction in defense related employment, there would have been about 800,000 more public and private jobs in 1970 than in 1969. In fact, there were some 140,000 fewer jobs. Excluding the Armed Forces, defense cuts converted a potential increase of about 500,000 to one of only 160,000. (p. 156).

Military created jobs of course are not evenly distributed throughout the economy, but have a big impact in a few key areas, such as ordnance, aircraft, communications equipment, electronic components, transportation, and ship building. These six areas accounted for 45% of the jobs created in the private sector in 1970, and are particularly dependent on fluctuations in military spending. Key capital goods industries are highly dependent on military spending. Thus steel had 6.2% of its employment created by military spending in 1970, the nonferrous metal industry 10.3%, the machine products industry very significant 20.4%, and the metal working machinery and equipment industry 7.5%. Expenditures on education on the other hand had their biggest impact in the furniture and fixtures industry, where it generated 10.9% of employment. It did however account for 6.8% of construction employment. The question is often asked why can't capitalism build schools and hospitals instead of preparing for war. Whose vital interests would be effected by such a move are indicated by the following table. We can see that one billion dollars spent on arms in 1970 created 91,600 jobs all together, with 37,000 of them in the private sector. One billion spent on education, however, created 123,300 jobs, 35% more than arms, but only 18,300 in the private sector, half as many. Those jobs mean profits too, and we can see why those industries heavily dependent on military spending might oppose major shifts in government spending towards education. The same billion dollars spent on health, welfare, and sanitation created 109,400 jobs, less than education, but still 19% more than arms. It would create 40,000 private jobs, more even than defense. Thus we can see why money spent on medical care and the environment might well meet the approval of some sections of the capitalist class. It is further clear that arms and education spending have quite different impacts on various industries, and that quite sudden changes in spending could throw large numbers of workers out of work. The ties of the labor bureaucracy and unfortunately many workers to such projects as the SST is sad testimony to the lack of any strong alternatives being posed in the labor movement.

AVERAGE NUMBER OF JOBS REQUIRED PER BILLION DOLLARS OF GOODS AND  
SERVICES PURCHASED, BY TYPE OF PURCHASER, 1970<sup>1</sup>  
(Thousands)

	Jobs in all sectors	Jobs in private sector	Jobs in public sector
All sectors	83.9	69.6	14.3
Private sector	78.7	78.7	----
Public sector	100.9	34.0	66.9
Federal Government	89.5	37.7	51.8
Defense	91.6	37.0	54.6
Nondefense	82.7	39.9	42.8
State and local government	110.4	31.0	79.4
Education	123.3	18.3	105.0
Health, welfare, and sanitation	109.4	40.0	69.4
All other	98.0	40.5	57.5

<sup>1</sup> Preliminary<sup>2</sup> Includes government enterprises.

SOURCE: Estimates by Department of Labor, Bureau of Labor Statistics;  
Manpower Report of the President, 1971, p. 159.

One measure of the impact of arms expenditures is their effect on various sectors of the economy. The following chart prepared by the Pentagon shows the percent of direct purchases attributable to military purchases. Of course the addition of indirect purchases would raise the figures considerably, but they give an idea of the magnitude of the military impact on the economy.

DEFENSE PURCHASES AND GNP BY MAJOR TYPE OF PRODUCT  
(\$ in billions)

Calendar years	Durable goods		Total durable goods	Non- durable goods	Federal, state & local payrolls	Other Services	Structures	Total GNP
	Aircraft & ord. (incl. missiles)	All other durable goods						
1958 US total	\$ 16.8	\$ 62.6	\$79.4	\$124.8	\$35.5	\$83.3	\$41.7	\$364.6
Def. purchases	14.3	5.2	19.5	4.5	15.6	6.1		48.7
Defense %	85.1%	8.3%	24.6%	3.6%	43.9%	7.3%	7.2%	13.4
1956 US total	\$ 11.6	\$ 78.7	\$90.3	\$135.1	\$40.7	\$101.6	\$51.5	\$419.2
Def. purchases	8.7	4.6	13.3	4.1	15.6	5.5	1.8	40.3
Defense %	75.0%	5.8%	14.7%	3.0%	38.3%	5.4%	3.5%	9.6
1961 US total	\$ 15.2	\$ 81.3	\$96.5	\$165.8	\$56.6	\$142.9	\$58.3	\$520.1
Def. purchases	11.5	7.3	18.8	3.5	17.7	5.6	2.2	47.8
Defense %	75.7%	9.0%	19.5%	2.1%	31.3%	3.9%	3.8%	9.2
1964 US total	\$ 17.6	\$109.4	\$127.0	\$192.4	\$70.0	\$174.2	\$68.8	\$632.4
Def. purchases	11.8	7.0	18.8	3.5	20.4	6.0	1.3	50.0
Defense %	67.0%	6.4%	14.8%	1.8%	29.1%	3.4%	1.9%	7.9

1968 US total	\$25.4	\$149.1	\$174.5	\$255.0	\$104.7	\$241.9	\$88.1	\$864.2
Def. purchases	17.3	11.3	28.6	5.2	30.2	13.1	1.2	78.3
Defense %	55.8%	6.4%	13.7%	1.3%	26.3%	4.3%	1.5%	7.7
1970 US total	\$26.7	\$153.5	\$180.2	\$288.1	\$126.5	\$283.8	\$95.5	\$974.1
Def. purchases	14.9	9.8	24.7	3.7	33.3	12.3	1.4	75.4
Defense %	55.8%	6.4%	13.7%	1.3%	26.3%	4.3%	1.5%	7.7
1971 US total	\$25.1	\$168.6	\$198.7	\$300.5	\$140.6	\$303.1	\$108.9	\$1,046.8
Def. purchases	13.0	8.9	21.9	3.8	35.3	9.1	1.3	71.4
Defense %	51.8%	5.3%	11.3%	1.3%	25.1%	3.0%	1.2%	6.8
1972 US total	\$24.2	\$195.3	\$219.5	\$317.2	\$155.9	\$325.1	\$127.8	\$1,145.5
Def. purchases	13.3	9.4	22.7	4.5	36.5	10.6	1.5	75.8
Defense %	55.0%	4.8%	10.3%	1.4%	23.4%	3.3%	1.2%	6.6

Even when aircraft and ordnance is separated out from durable product, the impact is quite sizeable. Consider the comparison of the percent of durables going to arms compared to the percent of the gross private product going to arms.

	<u>Percent Gross Private Products to Army</u>	<u>Percent Durables Other<sup>1</sup> Than Aircraft &amp; Ordnance to Army</u>
1953	10.1%	8.3%
1956	6.6%	5.8%
1961	6.6%	9.0%
1964	6.5%	6.4%
1968	6.4%	7.6%
1970	5.0%	6.4%
1971	—	5.3%
1972	—	4.8%

As the share of arms purchases from the private sector dropped, the impact on the non-aircraft ordnance durables rose. The overall impact in durables remains quite considerable up to 1972 with 10.3%. Again this excludes indirect impacts.

Towards the end of the Vietnam War some articles appeared arguing that military spending was less profitable than commercial work, and the shakiness of Lockheed and Grummen seem to back this view up. In 1971 the General Accounting Office of Congress released a study on the profits of military contractors for 1966-1969. It covered half of all defense procurement and 60% of all awards over \$10,000. The study compared the military profits of the companies to the commercial profits of the same firms.

Here twelve firms are separated out that account for more than 5% of total Department of Defense contracts for aircraft, missile, and space products during the period studied. The total sales of these 12 companies was over \$9 billion, with 80% of the sales being for aircraft, missile, and space products.

<sup>1</sup>U.S. Department of Defense, The Economics of Defense Spending: A Look at Realities, July 1972, p. 58.

## 1966-69 WEIGHTED AVERAGES IN BILLIONS

<u>Sales</u>	<u>12 Large Companies</u>	<u>Other 62 Companies</u>	<u>Total 74 Companies</u>
DOD	\$9.1	\$14.6	\$23.7
AEC, NASA, Coast Guard	1.8	1.5	3.3
Commercial	9.0	57.8	66.8
	<u>\$19.9</u>	<u>\$73.9</u>	<u>\$93.8</u>
<u>Profit as % of Total Capital</u>			
DOD	12.9%	10.4%	11.2%
AEC, NASA, Coast Guard	20.8%	11.1%	19.0%
Commercial	10.0%	14.6%	14.0%
<u>Profit before taxes % of equity</u>			
DOD	28.0%	18.3%	21.1%
AEC, NASA, Coast Guard	43.2%	18.9%	27.5%
Commercial	17.8%	23.6%	22.9%

Ibid, pp. 172, 173

We can see that the profitability of Military work is about equal to commercial work, and for the 12 large contractors it was considerably more profitable, especially on equity, whereas for the other contractors it was a little less profitable.

The average profit before taxes on equity for all durable manufacturing corporations with assets over \$1 billion was 23.3% for 1966-69,<sup>1</sup> so the military dominated corporations did about as well as the corporations in the same size range (21.1% in their military work, 22.9% in their commercial work).

The General Accounting Office made the following significant conclusion:

The major factor causing the rates of return on contractor capital investment for Defense and commercial work to be similar was the substantial amount of capital provided by the Government in the form of progress payments, cost reimbursements, equipment, and facilities. This reduced the capital investment required from the contractors for Defense work.

Quoted in Ibid, p. 172.

In other words, the Government puts up sizeable amounts of the capital stock the contractors can make a profit off of. These capital stocks are called Government Owned-Privately Operated (GOPO). In 1969, the last year for which data is available, the current replacement value was \$11.6 billion for the net GOPO stocks, or 1.9% of the total stocks. But in 1948 they were equal to 7.3% of the net stocks, but have declined at a steady rate ever since.

We could conclude that the rate of profit for 1948 was  $\frac{92.9}{282.7 + 11.7} = 31.7\%$ .

<sup>1</sup>Quarterly Financial Report for Manufacturing Corporations, FTC-SEC, 1st Quarterly 1970, p. 89, 68, 67, Table 5. Simple average.



as opposed to 32.9% if we exclude the GOPO stocks, and for 1968

327.1

$987.3 + 11.6 = 36.0\%$  as opposed to 36.5% without the GOPO stocks. But the rate of profit is only figured on the capital owned by the capitalists, not on what is contributed gratis by the government. That the government contributed 7.3% of the capital stock in 1948 and 1.9% in 1968 only shows its largess to the capitalists, and at any rate only benefits a tiny number of capitalists, mainly arms contractors. It is important to measure the impact of government spending and especially military spending on the various sectors of the economy. Data for 1970 shows 25.7% of all jobs created by Government, with 8.1% created by the military. 92.6% of public jobs are created by government purchases, the remainder by private purchases from government enterprises. In agriculture, only 3.4% of jobs are created by government, while in mining, it is 16.1%, one out of six, with 5.5% created by military spending, and in construction 30.0% with 25.1% created by state and local spending. 16.0% of manufacturing jobs are created by government spending, 3,211,000 jobs, or one out of six. Half of these, 8.1% of the total, are created by military spending. In the steel industry, 16.8% or 157,000 jobs are created, with 6.2% created by military spending. 2,622,000 jobs are created in the services, 6.2% with special concentrations in transportation and warehousing, 16.0% and Business Services, Research and Development, 19.6% between them one million jobs. All in all government spending clearly has a considerable impact on the economy.

In the vital capital goods sector, in 1971, 56.4% of aircraft employment was created by military spending, 20.3% of other transportation equipment (mainly ships), 17.7% of machine shop products, 10.4% of scientific instruments, 8.8% of electrical industrial equipment, 6.9% of metalworking machines and 7.2% of primary nonferrous metals. The capital goods industries are the most volatile in the economy, subject to violent fluctuations in investments, and here military spending provides a crucial floor.

Government expenditures have a tremendous effect on working class purchasing power. Not only do the salaries of government workers add to purchasing power, but government purchases from the private economy generate wages there directly and indirectly. Finally government transfer payments such as social security, unemployment insurance, and the like add very considerably to working class income. In 1970 the Government generated 29.4% of all wages. But when transfer payments are added, Government created 38.9% of worker disposable income, a tremendous amount. In 1970 workers paid \$152.5 billion in taxes, 32.3% of the average workers gross income. The new after-tax worker income generated was 10% greater, \$168.0 billion. What has happened is income distribution within the working class. The \$168 billion in post tax income is not generated simply by direct government spending, but is the result of indirect employment created to supply government contractors as well. Meanwhile the working class receives certain social services as a result of these expenditures, such as schools, public hospitals, etc. However, the workers employed in private industry as a result of government industry are exploited and contribute to the surplus value of their capitalists.

We can further add that the 10.3% of private jobs created by government spending means 10% of capitalist profits come from government spending, and also 10% of capitalist consumption. The very fact that

workers income is reduced by 32.3% shows the regressive way in which state monopoly capitalism can maintain the income of the working class. It is noteworthy that transfers contribute some 30% of this new income, rising to 32.0% in the recession year of 1970. Through the tremendous floor of government purchases from private industry, especially the vulnerable capital goods sectors, the effect of government expenditures in adding 40% to total working class purchasing power, and the role of such mechanisms as unemployment insurance which take effect in recessions the system has been up to now to prevent down turns in the business cycle from deepening into a depression.

	<u>\$</u>	<u>%</u>	<u>Total Employment</u>
Primary iron and steel	42,200	4.7%	397,200
Primary nonferrous	27,700	7.2%	386,600
Metal containers,	1,400	1.7%	81,400
Heating, plumbing, structural	11,500	2.3%	497,000
Stampings, bolts	22,400	6.8%	327,600
Other fab. metals	19,800	4.5%	439,800
Engines and Turbines	6,600	6.1%	109,000
Arm Machinery	900	.7%	123,200
Construction, mining, oil field machinery	5,800	3.0%	191,400
Materials handling mach.	5,300	6.1%	86,300
Metal working machines	19,800	6.9%	285,800
Special ind. machines	3,100	1.7%	181,800
General ind. machines	14,400	5.5%	261,700
Machine Shop Products	36,500	17.7%	206,500
Office, Computing equipment	10,100	3.8%	265,700
Service industry equipment	2,500	1.3%	135,200
Electric ind. equipment	36,700	8.8%	415,700
Motor Vehicles	12,300	1.5%	816,500
Aircraft	345,300	56.4%	612,800
Other transportation equipment	65,000	20.3%	319,800
Scientific instruments	29,200	10.4%	280,700
Statistical, photo equipment	11,000	6.9%	159,100
	671,500	6.8%	9,816,000

## IMPACT OF GOVERNMENT ON JOBS 1970

	Military	Fed. Non-Military	State & local	Total	Total Jobs Created
TOTAL	8.1%	2.2%	15.4%	25.7%	22,260,000
PUBLIC	26.2	6.3	60.1	92.6	14,966,000
PRIVATE	3.9	1.3	5.1	10.3	7,294,000
AGRICULTURE	1.7	-0.6	2.3	3.4	126,000
MINING	5.5	1.2	9.4	16.1	106,000
Nonferrous	12.3	2.2	-	14.5	9,000*
CONSTRUCTION	2.7	2.2	25.1	30.0	1,229,000
MANUFACTUR- ING	8.1	1.9	6.0	16.0	3,211,000
Lumber & Wood	15.4	-	-	15.4 <sup>+</sup>	101,000 <sup>+</sup>
Furniture	16.6	-	-	16.6 <sup>+</sup>	24,000 <sup>+</sup>
Printing	12.4	-	-	12.4 <sup>+</sup>	147,000 <sup>+</sup>
Paints	15.1	-	-	15.1 <sup>+</sup>	11,000 <sup>+</sup>
Stone & Clay	18.4	-	-	18.4 <sup>+</sup>	87,000 <sup>+</sup>
Primary iron	6.2	1.7	8.9	16.8	157,000
Heating, Plumbing	18.8	-	-	18.8 <sup>+</sup>	98,000 <sup>+</sup>
Ordnance	67.2	18.2	-	85.4*	221,000*
Primary non- ferrous	10.3	1.3	-	11.6*	48,000*
Metal work- ing mach.	7.5	2.0	-	9.5*	33,000*
Machine Shop Prod.	20.4	4.5	-	24.9*	61,000*
Electrical Industry Equip.	11.2	2.8	-	14.0*	61,000*
Radio, TV, Comm.	30.3	4.3	-	34.6*	221,000*
Electronic Components	24.2	4.2	-	28.4*	105,000*
Aircraft	51.3	8.1	-	59.4*	425,000*
Other trans. equip.	14.3	3.9	-	18.2*	59,000*
Scientific & Control instru.	11.1	4.3	-	15.4*	44,000*
SERVICES	2.2	1.0	3.0	6.2	2,622,000
TRANS. & WAREHOUSING	7.5	1.3	7.2	16.0	459,000
WHOLESALE & RETAIL	0.9	0.3	1.5	2.7	485,000
BUSINESS SERVICES					
R. & D.	0.6	3.2	9.8	19.6	608,000
MED. & ED. SERVICES	2.2	2.4	1.5	6.1	385,000

\* Federal only                    +State and local only

Manpower Report of the President, 1971, pp. 154, 158

**JOBS ATTRIBUTABLE TO FEDERAL PURCHASES OF GOODS AND SERVICES FOR DEFENSE  
AND NONDEFENSE<sup>1</sup>, BY MAJOR SECTORS AND SELECTED INDUSTRIES**

Sector & Industry	Thousands of jobs			% of all jobs in sector or industry		
	Total	Defense	Non-Defense	Total	Defense	Non-Defense
Total	8,922	7,013	1,909	10.3	8.1	2.2
Public Sector	5,249	4,229	1,020	32.5	26.2	6.3
Federal Government	5,213	4,212	1,001	36.0	69.5	16.5
Civilian	2,053	1,052	1,001	70.8	36.3	34.5
Gen'l gov't.	2,008	1,020	988	100.0	50.8	49.2
Gov't enterprises	45	32	13	5.0	3.6	1.5
Military	3,160	3,160	-	100.0	100.0	-
State & local gov't	36	17	19	0.4	0.2	0.2
Gen'l gov't	-	-	-	-	-	-
Gov't enterprises	36	17	19	7.1	3.3	3.7
Private sector	3,673	2,784	889	5.2	3.9	1.3
Agriculture	41	65	-24	1.1	1.7	-0.6
Mining	44	36	8	6.7	5.5	1.2
Nonferrous metal ores	9	8	1	14.5	12.3	2.2
Construction	202	111	91	4.9	2.7	2.2
Manufacturing	2,011	1,626	385	10.1	8.1	1.9
Ordnance & accessories	221	174	47	85.3	67.2	18.2
Primary iron & steel	74	58	16	8.0	6.2	1.7
Primary nonferrous metals	48	43	6	11.6	10.3	1.3
Metalworking mach. & equipment	33	26	7	9.5	7.5	2.0
Machine shop products	61	50	11	24.9	20.4	4.1
Elec. indus. equip. & apparatus	61	49	12	14.0	11.2	2.8
Radio, TV, & Communication equipment	221	193	28	34.6	30.3	4.2
Electronic components & accessories	105	89	16	28.4	24.2	4.2
Aircraft & parts	425	367	58	59.4	51.3	8.1
Other trans. equipment	59	46	13	18.2	14.3	3.9
Scientific & controlling instruments	44	32	12	15.4	11.1	4.7
Services	1,375	946	429	3.3	2.2	1.0
Trans. & warehousing	251	214	37	8.8	7.5	1.3
Wholesale & retail trade	221	166	55	1.3	0.9	0.3
Hotels; pers. & repair services, exc. auto	108	72	36	3.7	2.4	1.2
Bus. serv, research & development	304	204	100	9.8	6.6	3.2
Med. & ed. services & nonprofit org.	290	137	153	4.6	2.2	2.4

<sup>1</sup>Defense includes the Dept. of Defense & the Atomic Energy Commission; nondefense includes all other functions of the Federal Government.

	Gov't Purchases Goods & Services	GNP Origina- ting in Gen'l Gov't	Gov't Purchases from Private Industry	Gross Private Product	Gov't as % of Gross Private Product	DOD Private Purchases	DOD % of Gross Private Product
1948	31.6	17.4	13.2	237.6	5.6%	4.7	2.0%
1949	37.8	19.4	18.4	233.6	7.9	6.9	3.0
1950	37.9	20.9	17.0	260.0	6.5	6.5	2.5
1951	59.1	27.4	31.7	296.7	10.7	20.5	6.9
1952	79.7	31.2	43.5	309.3	14.1	30.1	9.7
1953	81.6	31.9	49.7	326.5	15.2	33.1	10.1
1954	74.8	32.5	42.3	324.7	13.0	26.3	8.1
1955	74.2	34.2	40.0	354.3	11.3	23.3	6.6
1956	78.6	36.6	42.0	373.3	11.3	24.7	6.6
1957	86.1	39.1	47.0	392.2	12.0	28.3	7.2
1958	94.2	42.1	52.1	394.8	13.2	29.6	7.5
1959	97.0	44.3	52.7	427.7	12.3	29.3	6.9
1960	99.6	47.5	52.1	433.3	12.0	27.9	6.4
1961	107.6	50.9	56.7	455.2	12.5	30.1	6.6
1962	117.1	54.7	62.4	487.9	12.8	33.0	6.8
1963	122.5	58.1	64.4	512.7	12.6	31.8	6.2
1964	128.9	63.0	65.9	547.1	12.0	29.6	5.4
1965	137.0	67.8	69.2	593.8	11.7	28.9	4.9
1966	156.8	76.6	80.2	648.8	12.4	35.9	4.0
1967	180.1	85.3	94.8	683.1	13.9	45.0	6.6
1968	199.6	94.9	104.7	750.9	13.9	48.1	6.4
1969	210.0	103.8	106.2	803.2	13.2	46.2	5.8
1970	219.0	114.7	104.3	834.9	12.5	41.6	5.0
1971	232.8	124.8	108.0	900.1	12.0	37.1	4.1
1972	254.9	136.1	118.8	985.4	12.1	39.3	4.0
	1.1	1.7				3.11	

## GOVERNMENT INTERVENTION IN THE ECONOMY

Governments are playing an increasing role in the economies of the advanced industrial countries as the following table shows:

	GOVERNMENT EXPENDITURES ON GOODS & SERVICES % OF GNP						Military 1965	Military as % of Gov't Expenditure
	1870	1913	1938	1950	1965			
Belgium				9.8%	12.8%	3.0%	23.4%	
Canada	4.6%	8.1%	10.9%	10.6	13.8	3.2	23.2	
Denmark			9.3	10.3	15.4	2.9	18.8	
France			13.0	12.9	13.3	5.5	41.4	
Germany	5.9	8.7	23.1	14.4	15.5	4.4	28.4	
Italy	8.1	9.7	15.7	11.1	14.7	3.4	23.1	
Japan	6.8	9.1	25.0		9.3	0.8	8.6	
Netherlands			11.4	12.6	15.9	3.9	24.5	
Norway	3.8	6.3	9.9	10.6	17.0	3.7	21.8	
Sweden	4.7	5.6	10.4	13.9	19.3			
Switzerland					11.8			
Great Britain	4.9	7.0	13.0	15.6	16.7	5.9	35.3	
USA	3.7	4.2	10.1	10.6	17.4	7.6	43.7	

USSR

21.6

23.0

We can see that military expenditures make up a large part of government expenditures, especially in the largest capitalist countries, the US 44%, Britain 35%, France 41% and Germany 28%. The big exception is Japan with 8.6% of its government expenditure spent on arms, less than 1% of GNP.

#### EFFECTS OF WORLD COMPETITION

As the economies destroyed in World War II were rebuilt after the war, they first developed their home market. At that time the US was the domineering force in world trade. Soon the formerly destroyed countries began to expand their trade with their neighbors. Japanese imperialism took over the trade of the South East Asian countries. First the Iron and Steel Community was formed in Europe, later the Common Market. By the late 1960's the uneven development of the advanced capitalist nations began to manifest itself in world trade and in increasing economic dislocations.

From the viewpoint of US capitalism the changes have been great enough. In 1950 US auto production was 76% of the world total, by 1970 it was only one-third. In 1950 the US produced 47% of the world's steel, by 1970 20%. At the end of World War II the US was the only shipbuilder, now it produces less than 2% of the new ships. The US was for many years the number one machine tool builder in the world, now it is number four.<sup>1</sup> In terms of its proportion of the world export market, the US share has dropped in the last decade:

#### WORLD EXPORT TRADE

	1960	1971
United States	15.9%	12.6%
EEC	24.6	30.2
Great Britain	8.2	6.4
Japan	3.1	6.9
Other Developed	13.4	13.9
Less Developed	22.0	18.8
Communist	12.8	11.2
Total	100.0%	100.0%

Trade within the EEC accounted for 34% of EEC trade in 1960, 48% in 1971. Russian trade with Communist countries accounted for about 6%. International Economic Report of the President, 1973, p. 7.

The share of Britain in world trade also dropped, while that of Japan and the Common Market rose. US manufacturing exports showed an even more dramatic decline. They were 27.7% of world manufacturing exports in 1958 and went down to 19.9% in 1971.

The late 60's was a period of unequal rates of inflation in the advanced industrial countries which influenced their price competitiveness on the world market. First we can examine how the US stood compared to its major competitors in 1964.

<sup>1</sup>U.S. Multinationals: The Dimming of America, AFL-CIO Maritime Trade Department, 1973, p. 65.

EXPORT PRICES RELATIVE TO U.S. 1964<sup>3</sup>  
(US = 100)

	US	Great Britain	EEC	W. Germany	Japan
Iron and Steel	100	82	78	78	70
Nonferrous Metals	100	98	99	100	
Misc. Metal Manufactures	100	92	91	90	73
Nonelectrical Machinery	100	91	92	93	
Electrical Machinery	100	106	95	97	91
Transport Equipment	100	93	98	93	
TOTAL	100	93	92	92	78

We can see that US prices are generally the highest and Japan's the lowest. Yet many foreign purchasers prefer US made goods even when they are more expensive either because they are custom built and are unique or superior, they are US made in general or carry a well-known brand name, they receive faster deliveries, better after sales service, tied grants or loans or in general there is no close foreign substitute.<sup>4</sup> However, prices do make a difference and for this reason we will compare the changes in prices from 1964 to 1972. Here are the changes in export price levels with all prices equal to 100 in 1964.

EXPORT PRICE CHANGES SINCE 1964<sup>5</sup>

	1964	1965	1966	1967	1968	1969	1970	1971	1972
US	100	103	106	109	110	114	120	124	126
Great Britain	100	103	108	108	99	103	120	124	140
W. Germany	100	103	104	103	101	105	114	122	140
Japan	100	100	100	100	101	103	109	113	127

We can see that up to 1969 US prices had risen faster than the three other countries. Britain's prices had risen almost to the US level, but the devaluation of the pound near the end of 1967 puts its prices below the other three countries. Only with the first dollar devaluation in the second half of 1971 did US export prices rise less rapidly than the other countries. We can now show price changes relative to the US = 100 in 1964.

EXPORT PRICES RELATIVE TO US = 100 in 1964

	1964	1965	1966	1967	1968	1969	1970	1971	1972
US	100	103	106	109	110	114	120	124	126
Great Britain	93	96	100	100	92	96	112	115	130
W. Germany	92	95	96	95	93	97	105	112	129
Japan	78	78	78	78	79	80	85	88	99

We can see here that Japan was first reaching US price levels of 1964 by 1972 following the dollar devaluation. By 1972 British and German prices were higher than the U.S. Here are prices relative to US prices for each year.

<sup>3</sup>Irving Kravis and Robert Lipsey, Price Competitiveness in World Trade, NBER, 1971, Appendix E, p. 20. Japan's total is a weighted average of the 3 areas of output which accounts for 58% of her total exports.

<sup>4</sup>Ibid., p. 153.

<sup>5</sup>International Economic Report of the President, 1973, p. 80.

## BRITAIN, W. GERMANY, AND JAPAN AS PERCENT OF US

	<u>1964</u>	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1969</u>	<u>1970</u>	<u>1971</u>	<u>1972</u>
U.S.	100	100	100	100	100	100	100	100	100
Great Britain	93	93	94	92	84	84	93	93	103
W. Germany	92	92	91	87	85	85	88	90	102
Japan	78	76	74	72	72	70	71	71	79

Here we can see particularly clearly the situation the US was in by 1969 when its prices had moved higher than those of its major competitors. However by 1972 British prices were 3% higher and German 2%, while Japanese prices remained 21% below US level. Since the end of 1972 there has been another formal devaluation of the dollar and a considerable slipping in its value due to floating currencies, so the situation of the US compared to the other countries has improved still further.

The decline in the share of US exports in the world market is linked to the activities of US multinationals operating abroad. In 1960 the US accounted for 30% of the world's chemical exports. By 1971 this had dropped to 20%. Meanwhile the book value of US multinational's investments abroad rose from \$237 million in 1970 to \$1.3 billion in 1971. The US supplied 28% of the world's electrical exports in 1960 and only 21% in 1971. Multinational investment abroad, in electrical goods, went from \$104 million to \$523 million. The US share of the Non-electrical machinery market declined from 33% to 26% while multinational investment went from \$192 million to \$1.5 billion. Finally the share of transportation equipment exports went from 33% to 30% while investment abroad went from \$336 million to \$1 billion.<sup>1</sup>

Imports of certain important commodities have grown considerable. By 1971-1972 imports into the US accounted for 37% of TV sets, 63% of phonographs, 92% of radios, 96% of tape recorders, 18% of steel, 20% of textiles, 53% of shoes, and 60% of sewing machines and calculators.<sup>2</sup> On November 16, 1972 50,000 garment workers in New York went on strike under the slogan "Stop Exporting Jobs - Limit Imports". 1,000 workers marched the same day in Los Angeles and several hundred struck in Atlanta.<sup>3</sup> Imports account for 86% of sweaters sold here, 42% of men's and boy's woven shirts, 28% of women's and childrens woven blouses. Other items where imports are heavy include 76% of tennis rackets, 30% of bicycles, and 96% of motor cycles.<sup>4</sup>

It is difficult to measure the jobs lost by exports. Former Secretary of Labor Schultz made one attempt, "About 1.8 million jobs in 1966 would have been required to produce the equivalent value of the 74% of imports that were competitive with US made products." By 1969 he estimated that 2.5 million workers would have been needed to replace competitive exports. From 1966 to 1969 700,000 more workers would have been needed. During the same years the number of jobs generated by merchandise exports rose by 200,000. It would appear that 500,000 jobs were lost from the new imports job loss, outweighing the gain from exports. The AFL-CIO estimates 900,000 jobs lost from 1966 to 1971.<sup>5</sup>

## MONETARY CRISIS

U.S. capitalism is part of the world capitalist economy. It cannot be understood in isolation from its world context. Although trade has a smaller impact on the US economy than that of most countries, it is still quite important. In 1966 12.6% of all jobs in agriculture, 10.1% in mining, and 6.9% in manufacturing were created by exports.<sup>6</sup> The US has had a balance of trade surplus (more exports than imports) from

<sup>1</sup>U.S. Multinationals, *Op. Cit.*, p. 68. <sup>2</sup>Memo from COPE, Apr. 30, 1973, *World Trade In the 1970s* AFL-CIO, p. 6. <sup>3</sup>New York Times, 11/17/73 <sup>4</sup>U.S. Multinationals, p. 69. <sup>5</sup>Chs. T. Bowman, "Report on Employment Related to Exports", MLR, June 1967, p. 17.



the end of the 19th century until 1971. But there has been a deficit in the balance of payments since 1950.

Since the dollar was established on the reserve currency of the capitalist world at the Bretton Woods Agreement, other capitalist powers used it for their commercial transactions and the US could meet persistent balance of payments deficits with dollars instead of gold or other tangible assets such as every other nation had to pay out. The US earned a surplus from its trade, but its outflow of funds to maintain military bases throughout the world and the investments of capitalists abroad gave rise to the balance of payments deficit. As long as the other advanced capitalist countries remained indebted to the US for bailing them out at the end of the war they had to accept dollars to meet US debts to them. But by the early 1960's France felt strong enough to request gold in exchange for the dollars it held. The US had to pay out gold from Ft. Knox since the dollar was convertible. Eventually the dollars held abroad by central banks, foreign corporations and individuals became three times as big as the gold in the hands of the US. The gold in Ft. Knox was \$22.8 billion in 1954. By 1971 it was \$10.2 billion. This dollar overhang as it has been called has reached some \$78 billion. It remains the albatross around the neck of the capitalist system, a claim on a fantastic amount of assets that seems increasingly unrealizable.

Some economists have suggested converting this dollar overhang into interest bearing notes to be funded by the US tax payer. Others have suggested repegging the dollar to gold at around \$200 an ounce so the U.S. gold supply will cover the entire dollar overhang. The question is intimately linked to the exchange rate of power relations between the capitalist currencies.

Currencies floating one against another, two types of exchange rates for a country, financial and commercial, joint floats, all of these are mechanisms for trying to re-establish currency parities which only exacerbate the problems. Part of the problem is the vast funds held by multinationals and private individuals abroad, some \$268 billion, double the liquid assets of the central banks and other official monetary institutions. If these institutions are stuck holding a weak currency during a devaluation they stand to lose the percentage of their holdings equal to the devaluation. Therefore it becomes a matter of necessity for them to move into a strong currency thus fueling speculation and pressure for a devaluation. The Achilles Heel of the joint floats, split exchange rates, special drawing rights, etc., is that they are all unstable and all threaten to disrupt world trade. Once shipments are made a change in exchange rates can wipe out the profits of one of the trading partners. The day may come soon when the Arab oil companies may refuse to accept the dollar in trade but demand gold or other tangible assets. For what good is the dollar if other goods are cheaper than B goods and no one wants to get stuck holding dollars since they are no longer convertible.

The big threat to the international capitalist order from the international trade and monetary crises is the interruption of world trade and the consequent industrial depressions in each of the countries. The monetary crisis may lead to a slowing down instead of expansion of world trade, or even its contraction. The increasingly sharp competition battle with the threats of trade and tariff wars will lead to the same thing.

When countries are faced with a flood of imports they usually turn towards tariffs, quotas, and other restrictive devices. Already the US has negotiated voluntary import quotas for textiles and steel with its major competitors. The period following World War II was one of tremendous expansion of world trade. Tariffs were reduced and free trade was proclaimed, though unrealized goal, of the nations

joining in the General Agreement on Tariffs and Trade (GATT). In general trade restrictions did go down and trade became more free. This is now coming to an end though it is the proclaimed goal of the Nixon administration. Trade wars involve dumping goods abroad below their cost of production, government subsidies of exports, etc. Already a mild trade war was recently fought in textiles.

The pressures are building in the US for restrictive trade measures on the part of those capitalists whose industries are hurt and the respective unions. In this regard the AFL-CIO with its Burke-Hartley bill is more in the lead than the capitalists. The consequence of restricting imports is inevitably retaliation. US farmers are increasingly dependent on Japan and the Common Market for exports, for example. If the US cut back on Japanese steel, ships, cars, televisions, textiles, etc., Japan is not just going to keep buying US goods. Trade has to be a two way street. A country operating autonomously (self-sufficiently) with high unemployment will become more inefficient economically, less competitive and the basis will be laid for predatory wars. However, if tariffs or quotas are not erected the effect will be further import penetration and more economic dislocation, jobs lost, etc. There is no way out of the dilemma. Either restrictive measures are taken which invite retaliation and cut down US exports, throwing workers out of work, or trade remains free and workers in industries effected by imports are thrown out of work. In either eventuality, forces at work outside the US, i.e. competitive capitalist countries, will have pushed the US economy out of equilibrium and given rise to new and widespread unemployment.

It is wise at this point to consider the impact of a disruption of exports.

#### INDUSTRIES WITH OVER 10% OF EMPLOYMENT GENERATED BY EXPORTS 1966

		<u>Jobs</u>
Non-livestock agricultural products	18.9%	408,000
Agricultural, forestry, & fishery services	12.8	23,000
Iron mining	16.7	5,000
Nonferrous metal mining	12.1	7,000
Coal mining	15.9	23,000
Chemicals	16.2	71,000
Plastics & synthetic materials	13.1	27,000
Primary nonferrous metal manufacturing	11.0	44,000
Engines and turbines	18.2	18,000
Farm machinery & equipment	11.3	17,000
Construction, mining & oil field equipment	24.6	47,000
Metalworking machinery	10.8	38,000
Special industry machinery	16.8	35,000
General industry machinery	12.8	37,000
Scientific & controlling instruments	13.4	30,000
Optical & photo equipment	10.3	15,000
Transportation and warehousing	11.4	318,000
Amusements	10.0	72,000
		<u>1,240,000</u>

Charles T. Bowman, "Report on Employment Related to Exports" Monthly Labor Review, June 1969, p. 17.

These are the industries that will be hit hardest by the disruption of world trade caused by trade or monetary crisis.

Here is a table showing Net Transactions in US Private Assets, which is the export of capital as they appear in the Balance of Payments Accounts. We are not interested in balancing them with foreign flows into the US since we are interested only in the behavior of domestically produced surplus value.

	Net Private Capital Flows Abroad	Gross Domestic Invest- ment	Foreign as % of Domestic Invest- ment		Net Private Capital Flows Abroad	Gross Domestic Invest- ment	Foreign as % of Domestic Invest- ment
1949	0.6	7.9	7.0%	1959	2.4	20.4	11.6%
1950	1.3	43.4	2.9	1960	3.9	35.2	11.0
1951	1.0	26.8	3.9	1961	4.2	25.4	16.5
1952	1.2	19.9	5.8	1962	3.4	28.8	11.9
1953	0.4	25.3	1.5	1963	4.5	13.6	32.8
1954	1.6	7.6	21.3	1964	6.6	69.7	9.4
1955	1.3	32.8	3.8	1965	3.8	64.3	5.9
1956	3.1	63.0	4.9	1966	4.3	89.1	4.9
1957	3.6	26.7	13.4	1967	5.6	76.7	7.4
1958	2.9	20.3	14.5	1968	5.4	72.3	7.4
				1969	5.4	119.7	4.5

We can see that in those years when domestic investment is low, particularly recession years, that foreign investment shoots up proportionately. This was particularly the case in the years preceding the Vietnam War buildup.

The accompanying chart shows the rate of return on book values abroad and domestically. Book values record capital investment at the historical year they were made with no adjustment for inflation to bring them up to current replacement costs. Further they show accelerated depreciation for tax purposes. For this reason the investment they show is less than the current investment, and since the amount of profit is the same when compared with book or current replacement costs, return on book values show an inflated rate of profit. However, comparing book values to book values will show trends. As can be seen since 1964 the domestic rate of return for manufacturers has been higher than that for investment in manufacturing abroad. Further, for all industries, the rate of return in underdeveloped countries is considerably higher than for investment in developed countries. Yet investment in underdeveloped countries is only 28.5% of total investment abroad. It is just too risky, despite possible gains.

## DIRECT INVESTMENTS ABROAD 1969

	Book Value		Net Capital Outflow	Total Earnings <sup>1</sup>	Royalties & Fees	Earnings as % of Book Value
All Areas	\$70.8 Bil.	100.0%	\$3.1 Bil.	7,148	1,369	10.1%
Canada	21.1	29.8	0.6	1,623	268	7.7
Europe	21.5	30.4	1.2	1,361	588	6.3
Japan	1.2	1.7	0.1	164		13.7
Australia, NZ, SA	3.9	5.5	0.2	319		8.2
Latin America	13.8	19.5	0.3	1,576	239	11.4
Other Underdeveloped	6.2	8.8		1,867		30.1
Unallocated	3.1	8.8	0.7	236	275	7.6

Source: Survey of Current Business, Oct. 1970, David Devlin and George R. Krueger, "The International Investment Position of the U.S. Developments in 1969, ", p. 31. <sup>1</sup> Earnings

include funds retained abroad and reinvested, and dividends, preferred dividends, branch profits, and interest returned to the United States.

<sup>2</sup>Royalties and fees supposedly cover research and administrative expenses incurred in the U.S. on behalf of the foreign affiliate. They also include super profits. They are not included in the rate of return figure.

## PRELIMINARY 1970 DATA ON U.S. DIRECT INVESTMENTS ABROAD

Area and country <sup>2</sup>	Total, all industries				
	Book Value at Year End <sup>1</sup>	Total Earnings	Rate of Return	% of Total Book Value	% of Total Earnings
All areas	78,090	8,911	17.4%	100.0%	100.0%
Developed countries	53,111	4,796	9.0	68.0	53.8
Canada	22,801	1,763	7.7	29.2	19.8
Europe	24,471	2,332	9.5	31.3	26.2
Japan	1,491	213	14.3	1.9	2.4
Australia, New Zealand, & South Africa	4,348	488	11.2	5.6	5.5
South Africa	864	130	15.0	0.2	1.5
Developing Countries	21,417	3,690	17.2	27.4	41.4
Latin American Republics & other Western Hemisphere	14,683	1,483	10.1	18.8	16.6
Other Africa	2,612	707	27.1	3.3	7.9
Middle East	1,645	1,181	71.8	2.1	13.3
Other Asia & Pacific	2,477	319	12.9	3.2	3.6
International, unallocated	3,563	425	11.9	4.6	4.8

<sup>1</sup>The value of investments in specified industries and countries is affected by capital flows among foreign affiliates.

<sup>2</sup>Does not mean that all countries grouped in an "other" or regional category have US direct investment at any given time.

SOURCE: Survey of Current Business, October 1971, p. 32.