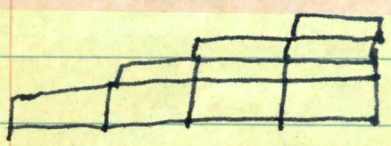
E. 302 Misc. Mtrls.

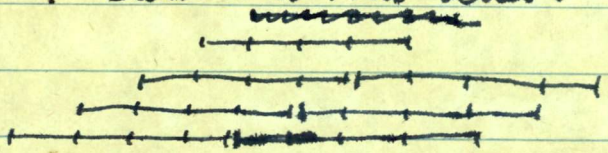
Visual Effects

0. Fotos .. of wasteful highways, etc.
1. Pix on blackboard
2. Cards
3. Light 2 kinds matches. Or candles.
   Long wooden one, repg. durable capl.
   2 or 3 short cardboard ones at once.
   Thus illustrate time dimension of capl.
4. Pouring water, glasses or bottles.
   Divide into 2 parts, pours faster.

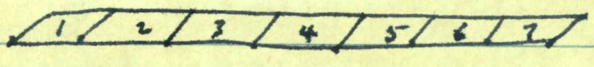
5. Blocks

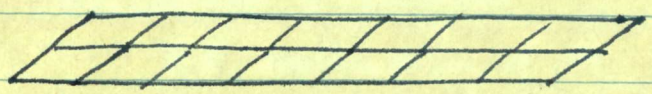


6. Calibrated rods better?



7. Checkerboard. With blocks or dowels of different heights. This device brings in land element.





8. Toy pump circulating water in reservoir. Graphically show 2 or 3, & one runs dry, needs water from others.

Props available

9. Stacks of cards
   cloths
   blocks
   paper napkins

10. Onion

11. Roll of paper

12. Reel

13. Fly rod

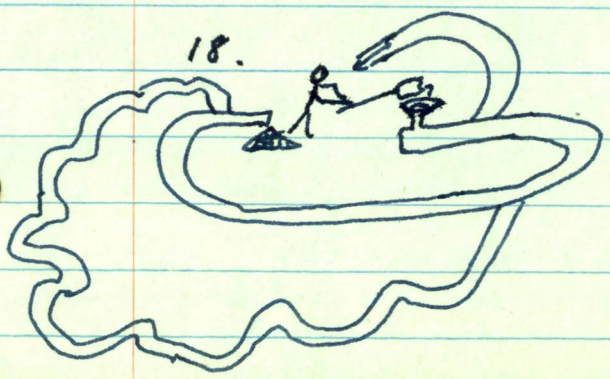
14. Toy clock w. gears

15. Toy guns

16. Blender

17. Chinaware, wedgewood vs. earthenware.

18.



Thurs. ~~Jan. 13~~

2. Mine

a. Should i.r. be hi or low?

b. Is a tax cut better than more spending?

c. Does it matter how a deficit is financed?

d. Is accelerated depreciation good?
Is land tax. & bldg. exemption good?

e. Are p.w. good?

f. Can we devalue $?
Higher inv. opps. at home are best answer to balance of payments problem.

g. Key costs to lower
Not labor as such, but mnpy. as such.
i. Raw materials. Farm commods.
Minerals
Fuels
ii. Utilities & xptn. MC pricing
iii. Strongest unions
iv. Urban restrictive, cost inflating devices.
Zoning & forced land-conss.
Bldg. codes.

4. Shd. we include s.o.c. in cap.-output ratios?
Shd it we look at cap.-labor ratios? Notch we keep getting more output per $ of cap. – also per man & per acre.

Provocative qus.

1. Is war spending necy. for prosperity?

2. Is unemployment inevitable for the less educated?

3. Is overpopulation the central problem?

4. Is overproduction a problem? Underconsumption?

5. Note the contradictory nature of many of our fears:
   a. Not enough capl. to employ labor, a complement labor
      Substn. of capl. for labor
   b. Malthus
      Overprodn.
   c. Finding emplmt. opps. if featherbedding is stopped
      Finding resources to educate, depollute, meet internat.
      commitments, etc.
   d.

Re unemployment.

If work week rises, on ave., [as in Apr., 1966, from 41.2 to 41.6 hrs.] we congratulate ourselves on the implication of Δd employment. Yet, decline of work week from 70 to 70 hrs. we attribute to labor's demand for ~~leisure~~ leisure. It is as much a sign of unemployment ~ or underemployment, disguised unemployment.

Retirement at 65 is often not voluntary, but enforced. School attendance ditto. The number of unhappy people who "do not know what to do with their leisure" — they don't want that much leisure, fairly clearly.

And the armed forces, again. The draft. Involuntary removal from the work force.

Subsidized college &c. education. Semi-involuntary removal from work force.

And the housewife who, in the war, took advantage of her freedom to weld a rivet — all unemployed, but not so listed.

Evidence on $\frac{\Delta}{\Delta t}$ i.r. before ~~cont~~ & in recessions

1. FR Chartbook, p. 23

[Note bias of data - prime comm. paper, hi-grade bonds, etc.

Big rise in i.r. shows up in changing classes — i.e. a given lender moves to higher risk class, must pay higher rates, is concealed by the way data are presented.]

[Revealed by very hi Δ opg. rev, '50-60, p. 20, while loans & inv., p. 19, rise much less]

2. p. 21, Interest paid by member banks.

3. p. 20 Inc. of Member banks from loans, & securities

Loan inc. rising fast. Probly from higher rates, enabled by shift of borrowers to higher risk classes; [& actual assumption of higher risk by inflating appraisals, etc.]

4. p. 12, loans have pulled M away from secs., increasingly so, 1944 - 64

✓ 5. p. 24, Yields on U.S. Certifs. & notes, 3-6 mos. Striking

✓ p. 26

✓ p. 28

David Guy Powers' formula, some useful excerpts from

State, accentuate, exemplify, exhort.

My work has been weak on the last. End with suggested action — public policy; individual.

Be intimate & affectionate — the more you are so, the more your audience will be.

Throw down a challenge -- "The profession seems to think..."

Dramatize

Use visual effects when speaking (e.g. draw pictures on blackboard.)
(Light match; make water fizz; pour ink in water (good way to illustrate diff. rates)

Wind up — tie a package, wrap it. Show gratifications; ask for action.

Gratifications: emphasize ends, not means.

E. 302

What happens to the resr. wh when you discount?

Vol. falls, turnover (as msrd.) rises.

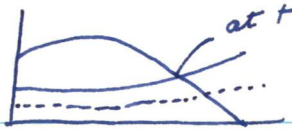
That figures.

Assets of a firm consist of pieces of capl. scheduled for future liqn. in fairly smooth stream. Smoothness achieved 3 ways

1. Apprec'g assets, by staggering of replacement
2. Deprec'g " , by building a smooth outflow into orig. capl.
   (Social staggering occurs thru mortgage inkets.)
3. Seal. funds
   By small capacity of wells, etc.
   and by staggered renewal

[4. Land, no replacement needed. Inc. in steady, (even tho gross ~~varies~~ falls as bldgs. age.)]

E 302



at this pt, each is reduced by half, no change in intensity!

But if tax is 100% of (MR - MC), owner doesn't care where he produces, decides on basis of personal efforts - produces less if he has to manage opn. & can't deduct. Produces more if he can live with padded costs.

Troubles w. inc. tax.

a. Can't tax rent inc. w/o hitting labor inc. too. Bes. if exempts mgt's. labor, how put a value on it? And his capl. and his bldg. tenants' labor & capl. Thus tax reduces intensity

b. If tax all inc., hits 1-opr., lets absentee deduct expenses as costs.

c. Lacks leverage - no minimum above zero.

d. Biases toward size, so can deduct losses of one opn. from gains of another.

Etc., etc.

e. Recurrent deprecn. allowed - terrible. (But that cd. be reformed)

f. Alternative uses of land for psychic income. But (a) diverts labor & capl., likewise, so intensity doesn't change — all res. diverted to comm. But land has fewer alts. than capl. - common method.

g. Cap. gains alternative

h. Bookkeep's problem, prov's costs

(Note big disec. of tax. Rent as % of gross is common method. That reduces intensity below opt. Saves landlord trouble - he isn't even as good as I.R.S. or tax assessor.)

i. Lowers savg., higher i, speeds depln? Lower yields, lower i, tends slow depln.

(Keynesians shouldn't be conservationists, bes in long run we're all dead. Nor shd. they tax income, lowers yields, while implicit return from liquidity goes untaxed.)

Another argument for small inventories — earlier discovery of mistakes. Maybe the reserves aren't what you think they are!

Schurr v. Perlman

Monetary (discretionary) vs. structural

a. Is there an issue? Macro v. micro.

i) Yes, aggreg. analyst wd. say better alloc. of ress. will not Δ aggreg. empl., just reshuffle a limited amt. Structuralist is summ; Say's law. Or, that improved structure can help aggreg. inv. — but they need to bolster argument that way.

ii) Policy - aggreg. vs. selective

iii) Monetary vs. fiscal --- no fiscal viewpoint repd. Too bad, bcs. that is big policy today.

iv.) $-\Delta C$? Choice of words, "deficient aggreg. demand", betrays presumption of fixed costs.

v) There is no full empl. w/o opt. alloc.; but underemplmt.

vi) Present adm. policy — both approaches, plus fiscal & monetary. Eclectic or Catholic.

Even give help to speed rf: accel. deprec.; effect of inc. tax on durability (altho. not foreseen) (& not unqualified, bcs. it lowers i) Biggest sinkhole of capl. is not pvt. invts., i., but public. Not too many houses, but too long streets — paid for by taxes on houses, that keep capl. out of houses. Not too many orchards, too much wth. supply. ✓

Higgins, Benj. Ec. Devmt. '59

Ch. 6 Cumulative Movement away from =m. – Harrod.

Secular dynamics: "trends," longer than fluctuations around a const. trend. (This is elabn on stagnation theses.)

Sec. causes of unempl. & infln.

Causes of opt. & actual cap. fmtn.

Antics. chronic defl. gap, in advanced countries; ~~defl. in~~ (infl. in underdevd ctries) Wrote in 148

In Eng., sec. downdrift of prop. to save, $\frac{S}{Y}$, avoids unemplmt. Not so U.S.

Indep. vbles: popn; techn. (wrong, both counts.)

Cap. coeff. is $\frac{\text{cap.}}{\text{output}}$. 'Neutral' invns. leave unchanged. "Cap.-savg" stream of invns, & "labor-saving." [Note lack of 3-factor scheme. An invention might save both labor & cap., be land-using. $\frac{\text{Lab.} + \text{lan.} + \text{cap.}}{\text{output}} = 1$

Lab. & cap. can rise or fall together. E.g. dry-lot vs. cash grain, or range.

Surely, w. cheap land, if can assume elast. demand for land, combine more l.v. w. given cap., than get faster turnover of cap., despite lower unit values. But if have hi l.v. & intensive devmt, then l.v. fall, get very slow turnover.

Thus cheap land means land-heavy factor propns – even in terms of local values. Faster turnover of cap., cap.-light mix.=

Labor is also spread thin, but in process, affect labor ÷ cap. Bec cap. is more like land, land subs for cap. more, tempering benefit. Labor gains most. Etc. . . . . ?]

5-3-62

1. Fncl. Mat.

A. $g = (C_o + V)(1+i)^t - V$

W- in gen framework, max. a, or i, or present value.

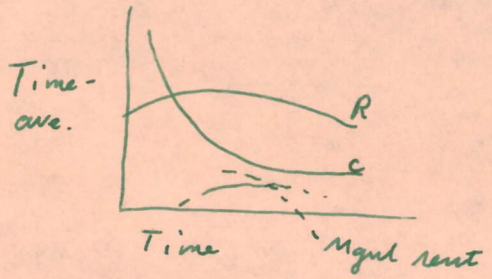
always in form $g' = g1 + a$

E.g. in Bale

B. Intermed. C & R

Lets us handle depreig assets. Both down to $R_m = a$

Rent comes from future use, in o.c.



Rent chops off old bldgs. Urban renewal.

2. Wicksell

3. Solo, & Rosenberg.

4. Eg: Land's role in macro ec:

a, Δ turnover

b, affect cap. fmtn

5. Hayek

6. Hansen, Hansen

Effect of turnover on employt

" " rent on turnover.

a. In timber, cattle

b. In quel care, or depreciating.

Sterility of purely monetary approach, or money-flows approach.

Cash-balance effect.

Factor proportions

Land & cap. funtn.

2 contrary stagnation approaches:

Harrod, worries re finding invmt outlets for oversavings

Hayek, " " " savgs to finish all the long projects

✓ Harrod reps. sterility of Keynesian ecs., ultimately.

Initial error of assuming fixed cap. coeff, C ($= \frac{I}{\Delta Y}$). By shutting

✓ one's eyes to important elements of flexibility in economy, can make it jump thru hoops, w/o warrant. (H's centrifugal forces.)

But is irreversibility problem. Sink too much long cap, then cannot

✓ quickly reduce $\frac{\text{cap.}}{\text{output}}$, thus lack cap. for growth, & even stability.

Thus can express Hayek in terms of Harrod.

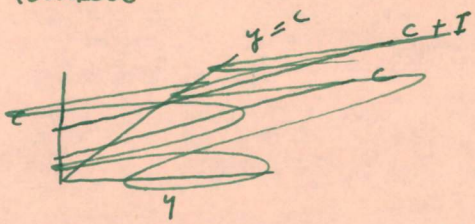
Popularity of Keynes & Harrod? appeal to patent groups

1. Unions
2. Anti-usurites, scholastics
3. Model-builders -- hobbyists
4. Hedonists, sybarites

Chap. 1: Requirement for steady growth - Hansen

~~$Y = C + I$~~

~~$C = f(y) = A + y(mpc)$~~



$y = k \cdot I_a$ [Higgins seems to have omitted the const.: $y = \frac{I + const}{mps}$]

$k = mult = \frac{1}{mps} = \frac{1}{mps + mp\,tax} = \frac{1}{\frac{dS}{dY_a} + \frac{dT}{dY_a}}$

I_a = aggr. inv.

Decline of autonomous invmt., postulated as basic cause.

Solutions: save less, invest more, or Δ ~~govt~~ govt spending.

[But you can Δ invmt. much by lower i.r. Like Harrod, assumes fixed factor propns.

Yet there was a problem – he may have missed cause.]

✓ Hansen argued invs. became highly cap.-saving. (automation? Fm machinery? Dams? Hiways? Cars?)

Bowman suggests higher degree of mopy is problem (p. 173)

Schump .. worsened climate of entrepreneurship (dw) Opposites.

Closing frontier – never happen!

1919-35, upward shift of cons. fn. Incorp. into thesis by double-talk, p. 175. Supports Hayek.

Higgins defines 'frontier' as area w. high ratio to labor & cap.

U.S. unique. No frontiers elsewhere.

Underdevd. countries, hi multipliers, nothing to multiply. Best any ~~invmt~~ invmt → infl., bec no saving. (B.S., many offsets, including diminst. & gets attn. by assuming away natural thermostats)

(New w.'s dom creates impasse

[In every cycle, road-bldg etc. cheapen land, thin out cap., quicken turnover, until l.v. collapse. Reduces $\frac{\text{labor + cap.}}{\text{output}}$, but ceply raises wages, thus encourages labor-sav. invmt., until collapse.]

Hansd says we must have cap.-using inventions to keep absorbing savings. (I say, elast. to absorb savgs by more durable bldgs etc. is nigh-infinite. Lower i.r. from 4 to 3%, big boost to present value of all 50-yr chgs.): $\frac{.228 \text{ @ } 3\%}{.141 \text{ @ } 4\%} \cong \frac{23}{14} = 1.64$, a 64% increase in present value. Actually works out nearer 61% — and that holds, at 50 yrs, for every integral drop of i. Say 60% Δ present value.]

$GC = S$

$G = \frac{\Delta Y}{Y}$

$C = \frac{I}{\Delta Y}$ = mgnl cap. coeff. (Does H. consider how much that can change?)

$s = \frac{S}{Y}$ = ave. prop. to save

$\frac{\Delta Y}{Y} \cdot \frac{I}{\Delta Y} = \frac{S}{Y}$ means $I = S$

Centrifugal forces — — hi G means more I means higher G.
But considers opposite more likely.
Reduce & abolish interest is implied policy.

Does housing play special role in balance of payments problem - bcs. it neither adds to exports nor subs. for imports.?

II. Rival Explanations of the Problems (Diagnosis) (& Prognosis)

Diagnosis

A. Self-serving positions

B. Ideological fixations – historical dogmas

C. Intellectual positions (including elements of A & B)

1 Intellectual ~~positions~~ (serious & credible)

Permit of new regions (surrogate for land deepening)

Imbalance of growth, simulating general overproduction ... freezing of real capl.

Underspending (over)

Cost-push. (Include land cost, H&P, H&H, etc. Schechter

Δ hungry. due to Δ overlen.

(Hansen, Fiscal Pol. & Bus. Cycles

(Terborgh, Bogey

Prognosis

a test of a theory.

short-run forecasting

secular .. .

III. Rival Policies (Therapy)

A. Sticks

B. Bundles

A. Sticks

1. Lower costs, asking prices, holdout or reservation prices. (Views on Re-duction

1½. Raise .. ..

2. Δ demand, consumer

2½. Δ saving

3. Substitute labor for other inputs

4. Improve markets

5. Δ exports

6. Redistribute income

7. Educate

8. Open new frontiers. Δ capacity or potential to produce.

8½. Close old .. – consolidate pops. Use present capacity.

9. R&D

9½. anti-R&D --- anti-automation, union work rules etc.

B. Bundles (programs, coordinated philosophically & administratively)

1. Higher i, lower wage

2. Higher wage, lower i; ΔM

3. Guaranteed income

4. Δ availability of land. Δ r.f. & rplmt. t.; etc.

C, ii

Cartels & cap. longevity

Produce less today; & capacity to produce more tomorrow. Essence of the cartel defense of retribution, evasion of solution.

Defense mechanism for deferring confrontation of basic problems.

"Forced saving"? In a way — Hayek simply was much too narrow in his attribution of causes.

Depression is a decline in capital spending. Since we don't distinguish clearly net I from replmt., that could be. & probably is, a decline in replacement inv.

Is the long cycle why we don't grow?

By putting new life into an old theory, a group of economists have highlighted both the causes and possible cures of our present creeping pace of industrial growth

No matter how gloomy any gathering of businessmen and economists may be these days, one bright note always provides an occasion for a complacent round of self-congratulations: Business may not have been booming for the past five years, but at least this lack of bounce has not yet led to a severe depression.

It's a question, though, whether this new stability should be a cause for unalloyed satisfaction. For a number of recent studies suggest that the forces that have produced this stability cut two ways: They may be keeping the economy out of a depression, but they also may be keeping it from another surge of industrial growth.

Long view. To see why this is so, you have to look at what's been happening during the past five years of industrial doldrums in the light of what these economists call the long cycle—a very different breed of animal from the ordinary business cycle. Ordinary cycles run an average of four years, while long cycles have averaged about 20.

The idea that there are long cycles in the economic growth of industrial countries is hardly new. It was promulgated earlier in the century, for example, by a Russian economist, Nicolas D. Kondratieff, who attributed each of the great surges in Western economic growth to fresh gold discoveries. And Harvard's late Joseph A. Schumpeter built his famous theory of capitalist economic development on the idea that there are long waves produced by bursts of major invention and innovation.

Later studies showed that neither of these theories could explain all the long waves in U. S. industrial development, and the long-cycle theory fell into disrepute. Now, however, it has been revived due to the work of National Bureau of Economic Research economist Simon Kuznets—the father of the U. S. National Income Accounts.

Two kinds of cycle. Kuznets rejects the idea that long waves are produced by any single factor. They can be produced by war, inflation or innovation—indeed by anything that causes investment to soar.

Kuznets, who teaches at Harvard, draws a sharp distinction between the long waves of economic growth and the ordinary garden variety business cycle. The ordinary cycle is due mainly to changes in inventory policy. In the broad sweep of U. S. economic history there have been many of these cycles; 26 show up in the NBER's business cycle chronology that dates back to 1854. These cycles vary greatly in length, but the average from peak to peak or from trough to trough is approximately four years.



Simon Kuznets

In contrast, the long waves—or Kuznets cycles as economists are now calling them—have an average length of about 20 years. Unlike ordinary business cycles, which reflect an alteration of actual rises and declines in the economy, the long waves show up only in changes in the rate of economic growth.

Over any period as long as 10 years, the U. S. economy has always shown positive growth. But in the upswing of the long waves the rate of growth is fast, and in the downswing it is slow.

Behind the wave. Kuznets finds the explanation of the long cycle in what's happening to business investment in new plant and equipment. A long upswing starts when new investment opportunities give rise to a fresh wave of capital spending. The whole economy then responds with a burst of growth. The money supply begins to grow fast, the balance of payments improves, consumer spending accelerates (particularly for housing), labor markets tighten, population burgeons. During a long upswing, the short cycles are a series of big upward leaps followed by only short recessions as the economy pauses to catch its breath.

But the U. S. economy has never found a way to keep the rate of growth of capital spending from tapering off. And when it does, the whole process is thrown into reverse. The short cycles become labored. And each of the complete long declines that the U. S. has experienced in the past has ended in a big bust.

Where does the U. S. now stand in long-wave chronology? The newest long wave, Kuznets says, started in the mid-1930s and reached its peak in the culmination of the great postwar capital spending boom of the mid-1950s. And the slow growth years since have been a period of long-cycle decline.

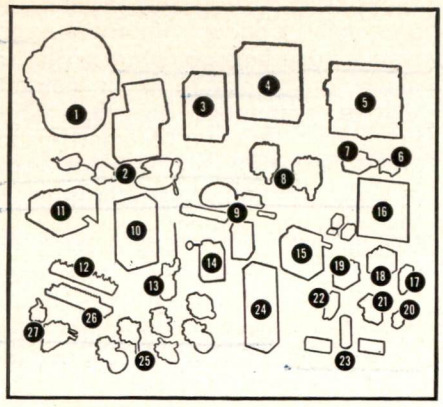


Bert G. Hickman

Since 1956-1957 many of the old symptoms of long-term decline have appeared. Bert G. Hickman, long-cycle expert at the Brookings Institution, cites statistics which show that the growth of the money supply has been painfully slow since 1957, that unemployment has become chronic, that the balance of payments has become weak, that housing expenditures (in constant dollars) haven't grown much, and that even population growth has slowed.

No bust, no boom. But if the current long downswing shows some disturbing similarities to those of the past, it also shows a reassuring difference. The previous long declines have all ended in smashes, such as the severe depression of 1873, the panics of 1893 and 1913, and the depression of the 1930s.

But this one hasn't yet ended that way—and long-wave experts are almost unanimous in thinking that it won't. Like most economists, they believe that the New Deal's financial reforms of the 1930s and the vast growth of government expenditures since the beginning of World War II make a new crash highly unlikely. But what is surprising—and disturbing—is their view that these changes also may make it difficult for the economy to embark on the rapid



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cided that a stalemate between this country and the Soviet Union is developing and that it makes no sense to continue building up U. S. nuclear forces beyond present goals.

No bombers. For the first time since before World War II, the U. S. today isn't producing a manned long-range bomber. Next year, the final production contracts will be awarded for Polaris missiles and submarines; the year after that, the final orders for the Air Force's Minuteman ICBM.

Efforts are being made to improve both missiles—Polaris and Minuteman—and if improvements turn out to be substantial, some additional output could be ordered.

In other fields, major research projects are working on an advanced ICBM and on experimental manned vehicles such as the X-20 (formerly Dyna-Soar) and an "aerospace plane." These could be the forerunners of new strategic weapon systems, but the Pentagon doesn't yet see prospect of volume production.

Aircraft purchasing. Despite the supplanting of long-range bombers by missiles, military aircraft buying is still on the way up. The Air Force will buy more than 1,000 McDonnell Phantom fighters over a five-year period, on top of big Navy orders for the same plane. Big production contracts are expected for the General Dynamics-Grumman TFX fighter for Air Force and Navy and for Lockheed's C-141 turbofan transport, when they get through the development stage.

Aircraft buying could be swelled even more if experimental vertical take-off and landing (VTOL) planes pan out and if the Army gets an O. K. for its plan to convert several divisions into airborne assault units. The Army has proposed to buy more than 20,000 fixed-wing planes and helicopters at a cost of more than $1-billion in the next five years.

Besides, the Air Force must sooner or later replace its fleet of around 3,000 administrative planes, which include ancient C-47s.

Shipbuilding. Also likely to help offset the tapering of strategic weapon procurement is a spurt soon in shipbuilding. Much of the Navy's fleet is due for replacement; 75% of the ships were built during World War II. McNamara's office won't say how much modernizing and replacement is planned, but it is likely at least to balance the phasing-out of Polaris submarine construction.

The Navy has proposed a minimum of 518 new vessels at an annual cost of about $3-billion through 1971, but this has been scaled back by McNamara. A major new element sought by the Navy: a class of Sea Hawk destroyer escorts crammed with electronic equipment.

Missiles and space. Unknown quantities in future military procurement include the Army's Nike-X anti-ICBM project and the Air Force space program. Technological breakthroughs could push military spending substantially higher.

Meanwhile, buying of ordnance equipment, vehicles, and other conventional hardware is scheduled to peak in about a year, then perhaps slide off, as the Army achieves its modernization goals.

Pentagon thrift. While the major downtrend in costs of defense is in the strategic retaliatory forces, Secy. McNamara's vigorous cost-cutting program is having a potent over-all effect. McNamara is pushing to trim the buying of spare parts, to tighten controls over inventories of all kinds, to introduce new efficiencies in procurement procedures, and to eliminate "goldplating' in designs.

McNamara also says that the past two years' buildup has "put us in a position where we can now afford to move more carefully in the initiation of new major weapon system developments."

McNamara and Hitch have introduced a system of heightening cost-consciousness by projecting defense projects and costs for five years, lumping projects that have related missions and collectively estimating long-term costs. These projections are tentative and, Hitch explains, "not predictions of future budgets."

Economic impact. However, Morris' office has been directed to translate such projections into potential economic impact on procurement. It has completed a study covering about 180 plants in more than 60 cities involved in major aircraft and missile contracts, showing the effect of these contracts on employment levels. Similar studies are being started in other phases of procurement.

Officials won't discuss specifics of their aircraft-missile study, first because they say national security is involved and second because they don't want to create "either unreasonable panic or unjustified hope by revealing what we see ahead."

Nevertheless, the study gives them a good idea of which communities may be unduly dependent on federal contracts, and unofficial hints are going out to leaders in the communities involved. There's no sign that the Pentagon is going to base future procurement decisions on local economic effects, but it seems to feel that a warning to some communities is in order. **End**

growth that has always followed long-cycle declines in the past.

Chief culprit. The main reason is to be found in the chief corollary of the growth of government spending —the sharp rise in tax rates. As Hickman sees it, the rise in tax rates has greatly blunted the potential impact of rising capital spending. Instead of coursing through the economy, a bigger percentage of fresh investment dollars now finds its way into the government's coffers.

The Federal Reserve, too, contributes to the new rigidity of the economy. According to NBER economist Manuel Gottlieb, previous long-cycle revivals were abetted by monetary buoyancy. The ingenuity of financial institutions in finding ways to increase the quantity of money based on a limited gold supply gave the economy a zest that Fed controls no longer allow.

Other problems. But government isn't responsible for all the new potential difficulties of growth:

▪ In previous long upswings, the U. S. was able to rapidly expand its industrial work force by drawing on the farm population and immigrants.

In the 1960s the U. S. will be forced to draw its industrial workers from a relatively fixed base of population that is growing fast only among the young and old. The number of workers in the prime 35-44 age group will actually shrink.

That means that any new upswing that gets started could be held back by a dearth of workers of the ages in which productivity is highest.

▪ Automation and other technological changes that now provide the main motive power for new investment are reducing the boost that the economy gets from new capital spending. Because these changes have greatly increased the efficiency with which capital can be used, it now takes fewer dollars of new investment to produce a dollar's worth of output. This drop, means new investment projects now require less cash—hence create fewer jobs and less purchasing power.

Why wait? None of these developments, of course, means that the U. S. is stuck on a path of slow growth forever. "I'm sure that the long cycle will turn around some day if we just wait for a new wave of inventions or for the upsurge in the prime population that will occur in the late 1960s," says Hickman.

"But then," he adds, "why wait?" For Hickman sees the effects of these factors as "slow and uncertain" compared with "the immediate results that could be achieved by a substantial tax cut to augment private demand." **End**



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