ARA Proposal, 'Structural' unemployment, '62 - '63

The structure of capital, ~~Structural~~ Unemployment, and ARA Policy

See pp. g-3 to g-5, esply.

I. Intro.

A. ~~General orientation~~ Relation of research to policy. Research to be policy-oriented, but not within narrowest confines of what is possible to morrow. a golden mean sought between the ideal & the feasible.

B. Structural emphasis. Keynesian revolution has displaced classical emphasis on real as vs. purely monetary phenomena, replaced it w. heavy emphasis on manipulating i.r. & spending as foundation of policy. Present research takes cognizance of Keynesian thinking, but seeks to balance it w. renewed emphasis on real structure of the economy, including the structural effects of low interest rate policies. ~~After a generation of reliance on inflation rising price levels~~ it seems plausible that we have reached a stage of ~~low returns to~~ ~~spending~~ The recent experience of ~~Having reached a stage where~~ inflation ~~is~~ w/o full employment is a grim reality, we have probably suggests we have reached dim. rets to spending policies, and need to reexamine structural problems.

C. Meaning of "~~the structure of~~ capital ~~structural in this study~~". Emphasis on complementarity of nation's capital stock to its labor supply. Factor proportions. That, in turn, related to frequency of ~~renewal~~ replacement of capital items, and frequency of renewal of sites. Wickesell's example of ~~shortening wine and~~ varying maturation period of wine to adjust structure of capital stock to needs of employing a ~~fixed~~ larger labor force. Joan Robinson's erroneous rejection of the concept. Replacement frequency of capital related to renewal frequency of sites, thus determining labor-intensity of land use over time.

D. "Transformation" "Conversion frequency" and employment. A c.f. ≡ no. of times per year a given fund of capl. is converted into a new form by being consumed by owners of inputs in exchange for their current services. It is reciprocal of average durability, and is measurable, where several staggered conversion cycles overlap. as sign ÷ fund in any pd., at yrly rate.

c.f. is weight also be called turnover rate, or replacement freq., a real velocity of capl.

a long cycle, or low c.f., combines given labor w. much cap.-time & land-time. (ref. here is to initial & terminal labor; in between is related to c.f. of its own matching capl.) applies only to capl., not land, bec land not produced, never terms over. Is related to land use, however.

Look's at it the other way, that means a given fund of capl., & given resource base, emp can employ varying nos. of people depending on c.f.

Specific examples.

1. Forest rotation, speed shorten from 60 to 30 yrs, employ planting & harv. labor twice as often on a given site, and using less capl.

2. Housing stock of a city. Reduce life-span of houses from 100 to 33 yrs., and labor is employed renewing 3% of sites yrly, instead of 1%. added benefit: net growth of total housing stock becomes a smaller % of all construction, hence instability of growth has less relative impact.

[This case differs from (1) in that increasing ~~emp~~ renewal freq. of housing sites does not Δ c.f. of housing capl. in same mire., bec. most housing capl. is recovered in the early yrs. of house life anyway. Δ of empl. is ∴ mire thru Δ prpn. of labor to land-yrs., rather than to cap-yrs.]

3. Individ. w. limited capl. of $100 seeks to max. his emplmt opps. He chooses business where cap. turns fast. If once daily, gross $36,500 yrly; if buys land plus return to cap. plus return to his labor. If buys land, gross c. $5/yr. Cannot an agency, w. limited capl., max. emplmt multi. using same principle?

E. Capl. conversion & n.i. 'Conversion' means the metamorphosis of a capl. fund of one pd. into that of the ff. pd. by its consn. & replacement. The old fund is replaced by the services or inputs of the factors whose owners are compensated & it sustained by consuming it. all production except services & net new cap. formn. requires one conversion of the preexisting cap. fund. in greatest = the value of the product. Cap. conversion is a process thru which almost all factor services must go to enter into the modern economy of exchange & specialization several things follow:

1) Many factors determining emplmt & inc. may ∴ be brought to focus in factors detg c.f. of capl.

2) No substantial Δ n.i. or emplmt is cap. conversion is limitational on n.i., a bottleneck

possible, however favorable other conditions, ~~who~~ if q. or c.f. of cap. fund
aside from service & cap. burden, real n.i. = a x c.f.
does ↑ Δ also; 3) ~~Δ~~ Factors tending to Δ c.f., in presence of other favorable conditions, tend to Δ empl. & n.i. 4) The employment mult. of a given fund of cap. varies directly w. its c.f.

E-1. T.f., factor proportions, and waste. Speed of t.f. ~~might be interpted. as~~ is not to be confused
~~E-1 Capl. t.f. and waste~~: w. wasteful destruction of capl. simply to shorten its life; but initial planning of invmts for quicker recovery of capl. by bldg. in less durability. Δ t.f. is a matter of lowering the propns. of capl. and land-time in the value of the final product.

F. Cap. conversion freq. & site renewal freq. They are related but not identical. Site renewal is slower -- it does not occur until last capl. has been renewed. Demonstrate that that is time whether capl. is appreciating or depreciating.

Rapid cap. c.f. is possible w/o site renewal if cap. migrates, leaving behind the ecty. empty shells of exhausted bldgs. That presumes continual movement to fresh lands.

The essence of areal redevelopment policy is to provide link the renewal of old sites w. the reinvestment of cap. liquidated from older stocks. Policies promoting rapid c.f. of capl. are not enough; policies promoting site renewal are essential. Just as hi i.r. make it costly to hold cap. over time, so hi qty. charges on land, ~~or~~ in the form of rents, taxes, or imputed interest, promote frequent renewal.

G. C.f. as an ec. thermostat | Add amdmt on p. ~~g-4~~ g-4

The presence of a surplus of labor should tend to correct itself thru a slight decline in wage rates in the ff. way. ~~If a product the c.f. of a kind of capl. is low, high or medium, say one year,~~ say a product is of such a nature that $100 ~~be~~ of labor is "stored up" by investment in the product, and liquidated after one year for $105, a 5% return. Now a 1% drop in wage cost, to $99, results in a 20% Δ in the rate of return, from 5% to 6%. Cf. that to a product like timber, where $100 of initial labor is stored up for 50 yrs & liquidated for $400, a ___% r. of r. Now, a 1% drop in labor costs has negligible effect on r. of r., & a ___% drop, to $___, wd. be necy to Δ r. of r. to 6%.

So a slight drop of wage rates pulls cap. out of long into shorter invmts; i.e., out of capl-intensive production & into labor intensive production. Thus the same output can be produced with a higher labor component, and as we began by postulating surplus labor, a higher output is produced with the same capital component, by virtue of the capital's turning faster.

G (cont.)

capl. turnover is also a key to the labor/land ratio. Hi c.t. means hi renewal freq., and fewer land-years being mixed w. each dose of or pulse of construction labor, so in the final product there is a richer mix of labor rel. to land.

Note that, by introducing the c.t. concept, we see that the demand for labor is extremely elastic (given some flexibility in the capl. stock), so the doctrine of ameliorating unemplmt. by dropping wage rates is not a counsel of extreme sacrifice by labor, but only a matter of a small adjustment

H. The thermostat and technological" unemployment

The presence of the thermostat is an economy's protection against extreme and irresistable substitution of capl. for labor, as publicized in recent scare stories about automation, cybernetics, etc. Cite Don Michael. The automation equipment is itself stored up labor (& land), & the extent to which labor in this form subs. for direct assembly-line labor depends on the relative prices of labor & capl. & land. A slight fall of wage rates speeds the c.t. of cap. & absorbs the surplus labor. Elaborate this thesis, and consider also role of land & rent.

I. T.t. and waste. The implication that Δ t.t. can Δ employment is not to be confused with the thesis of making work thru deliberate inefficiency, planned obsolescence, & breaking windows. The implication is rather that factor proportions (over)

7 (resumed) From the aggreg. nat. viewpoint, area redevelmt is preferable to migration of cap. to new areas, bcs. the latter requires large increments of new social overhead cap. (the more bcs. initial settlement is usually scattered. Cap. in roads, appliances, etc. there are unusually low c.t.). Redevmt, on the other hand, utilizes existing capl. & helps recover & salvage its remaining values for reinvestment. Thus, in effect, redevelopment ✓ As overall c.t. of nation's capl. stock while also adding to its total value by salvaging residual values that are lost when migration deprives stationary capl. of its demand.

as an additional factor, redevmt. has the advantage of avoiding the creation of a pattern of diffused hi t.v. over wide areas (the lands being underutilized), which pattern by filling the demand for assets tends to discourage real capl. forms.

I. Objections to concept of c.t.

Why has a concept of such seem'g analytical power not been developed by ecs. profession? Historical antecedent: classical 'circulating capl.'; objections to wages-fund concept, based on assumed fixity and constancy c.t. Austrian "pd. of production". Caption rejection by arguments of Clark vs. Bohm-B. & Wright vs. Hayek, related to Clark's initial motive to ✓ erase the distinction of land from produced capital, & conceive of capl. as an immortal disembodied spirit. Latter support by neo-Thomist

are adjustable, thru adjustment of relative factor prices, to absorb any redundant inputs. If it be objected that all inputs are redundant relative to aggregate demand, the answer is that what we call "aggreg. demand" is not a purely monetary phenomenon, but is a manifestation of the real t.f. of capital, increasing as t.f. Δs ... and this is the mechanism whereby a given fund of capl. is combined w. a larger labor force. Elaborate.

J. T. f. & aggr. demand.

desiring to obscure the possibility of cap. consumption thru diminishment.
"Ricardo effect" — where Δ wages leads to Δ durability of capl.
Contributions of Wicksell, Spiethoff, Cassell. ✓ Criticism of Ellis, Stigler,
Hayek came closest to the concept, but killed it by obscurity, unbalanced
emphasis on reactionary policy implications, counsel of despair, and
alienation from the intellectual world. He failed to integrate his analysis
with the spending analysis coming into vogue in the 'thirties, but emphasized
their antagonism. This study seeks to integrate the two.

I. Integration of c.f. approach and spending approach. A problem of translating two different sets of terminology into each other. Each concern the same set of real phenomena.

First point of contact between the 2: most income-creating spending is, proximately, a fn. of replacement. "Consumption" is not inc-creating unless we assume automatic replacement of consumed goods, as K-n ~~sem~~ model does. That tends to obscure important point that real cons. is limited by "consumability" of the capl. stock. "Consumability" is reciprocal of durability. E.g. a house releases cap. stored in it at a rate largely predetermined by initial construction; liqu. cannot be accelerated by Δ cons. spending. Same true of most capl. except some inventories.

~~Δ cons spending can result in Δ real~~

As between monetary & real influences, latter seem more fundamental: Δ cons. spending, ~~in~~ money can result in Δ real n.i. only if structure of capl. stock is such that its c.f. can rise; but Δ c.f. ~~can occur w/o~~ consumability of the real cap. stock tends to create its own synchronized monetary demand, as capital-holders Δ their ~~investm~~ gross invest. in step w. a) The need to replace exhausted capl. (e.g. to stock empty shelves) & b). The availability of funds from liquidating capl.. & c) anticipation of ↑ Eb. The causative initiative at any time lies in the structure of capl. inherited from previous pds. It is easy for money flows to adjust to replacement needs, but might impossible for the structure of capl, a massive & ponderous fact, to adjust quickly to changes in spending. That holds especially for Δs to c.f., for

whereas liquid capl. may readily be frozen, frozen capl. may only be thawed on the time-schedule initially built into it.

Real cons. is limited by what is available to consume. Emphasis shifts from willingness to buy to willingness or ability to sell, & latter is fn. of rate at which material cap. stock is prepared to release its stored-up services to consumers.

A 2d point of contact is in the liq. pref. thy. of interest, wherein i.r. held by S of M & demand for M, and reduced willingness to lend or invest has to be interpd as 2d demand for M.

?

K. Liquidation, replacement, & the need for space

The automaticity of replacement of consumed capl. depends on space clearance. Replacement requires a place.
Capl. recovered from old invmts creates opp. for replacement automatically only if space is cleared, as w. goods sold from shelves. Depreg assets like bldgs, however, yield up most of their capl. w/o releasing any space. Analogous to emptying a cracker box on the shelf, emptying it of value but not clearing the shelf.
Unless new space is provided on other sites, replacement is not automatic, recovered funds may be hoarded or diverted .. neither one creating inc.

Policy of hi i, i.., must entire key to assuring hi c.f. New "shelf space" must be arranged, either by clearing old sites or preparing new ones.
and it discourages social overhead invmt. that brings in new land.
Hi-i doesn't encourage clearance of old sites; invt. in durable
So hi-i is not the kingpin policy to which anal. leads. Clearance of old sites & their release to redevelopers is the most desirable intermediate policy goal.

That implies making it costly to hold sites. Hi qty. site cost also subs. for a reinforces hi-i as means to accelerate c.f. — bcs. slow cycles, that consume many capl-qts per labor-unit, also needy consume many land-qts

L. Migration vs. redevelopment

New "shelf-space" (outdoors) can be supplied 2 ways, by clearance or devmt. of new lands. We have relied largely on the 2d. It is a trap, however, that lures us into a bust. Cheap new land offers invt. outlets for the capl. recovered from older bldgs., but its very cheapness makes that a one-way trip. It sucks up capl,

but relieves it again only slowly: social overhead mechanism mentioned;
? in pvt. sector, cheapens all land, old as well as new, thereby weakening the
land-time-cost constraint on durability. That, in turn, creates
danger there must be enough capl. to improve all the land.

M. Area redevelopment vs. site redevelopment

~~Area redevmt. is, in a period of~~
The distinctive philosophy & contribution of area redevmt. is to emphasize
the salvage of sites already prepared, as vs. devmt. of new sites. There is room
for exceptions, as the more qual. goal is a proper balance of instit., but in
qual. a proper balance calls for more redevmt & less new devmt.
In pursuit of that principle, new indl. parks are of dubious merit.
They might contribute to regional renewal, on a larger scale. & to be
justified. But on a micro scale, they are a last expedient after
renewal of older sites has been thoroughly explored.

L. New devmt. vs. redevmt.

~~Clear~~ "outdoor shelf-space" for new instits comes from either clearance
of old sites, or devmt of new. a bias toward the latter is built into
most of our institutions. Elaborate, specify.
In terms of employment, a shift toward renewal of old sites is
preferable. New development absorbs enormous capital, and freezes it,
thus lowers c.f. of the nation's cap stocks.
It also lowers ~~land~~ unit land values, over the nation as a whole,
and thereby reduces the pressure to renew old sites, hence lowers
renewal frequencies. To be sure, it tends to compensate for the latter by
the greater quantity of sites: i.e., 200 sites renewed centenially (over)
New devmt. is especially undesirable if, as often has occurred, it
is carried to ~~the point~~ such excess that much of the capl. sunk in social
overhead can never be recovered and simply wastes.

means the same construction employment as 100 sites renewed semi-centennially (2 per year in either case.) But there is a net difference in that twice as much of the nation's capital is tied up in social overhead to service the 200 sites, ~~leaving less to improve them and to~~ thus lowering the overall t.f. of our capital stock. There is also a difference in the effect of irregular growth on stability: where 2% of sites are renewed yearly, a growth of .5% yrly. ~~Now less~~ is 20% of all bldg: where 1% are renewed yrly, it is 33%.

N. Keynes & the assumption of automatic replacement.

In Keynesian models, the assumption of automatic replacement of consumed capl., & automatic availability of capl. for consumption, ~~permits~~ ~~the analysts~~ leads to the conclusion that low i.v. always stimulate n.i bes. they encourage net new invmt. What is neglected is the character of the new invmt. (greater durability) will be such as to lower c.f. in future pds. The point is clarified by renaming c.f. as "reinvt. freq."; ~~& contemplating~~ to emphasize that ~~all invmt. except net new invmt.~~ the inc.-creating spending we call invt. depends largely on the velocity of rotation of a nation's cap. stock. That can be expressed in Keynesian terminology, but only w. some strain. So develop an altered n.i. model in which gross invmt., rather than net, is a leading concept, and is largely a fn. of replacement ~~needs~~. Gross inv. determines inc. which determines consumption ... thus keeping cons. in balance w. the rate of thawing of the capl. stock. Gross invmt. depends on the reinvt. freq. of the cap. stock, as well as its size.

O. C.f. & factor propns. (~~Call it "r.f.", reinvestment freq. Then emphasize inv. creation.~~)

Factor proportion is a concept currently much used in anal. of both sec. devmt. and the unemplt. problem. ~~Clarity is served by stating one in the other & adopting these.~~ c.f. approach & f.p. approach can be reconciled. & used to reinforce one another. Hi c.f. corresponds to factor mix lean on capl. re labor. View this over time, for any one cycle; & ~~at a given moment~~ in a short pd., where several cycles overlap so that replt = lgn. & capl. stock is const. C.f. = flow of output / stock of capl.

To absorb unemployed labor, produce same output w. more labor in the factor mix; or, better, more output w. more labor & same capl. & same land.

Factor propns. are affected not just by the durability of a machine, but also by its comply. to labor during its life span. Indeed, most anal. of factor propns. emphasizes the latter to exclusion of former. Proposed study will undertake to integrate both aspects.

Factor proportions are a 3-way balance, with land as well as capl. & labor. Sg t.f. of capl. surely tends to bring in more land, thus spreading labor over more land & sg labor's MRP. Thus, if all houses are built w. less

initial durability, cap. & labor are released to improve other sites.
E.g., for $40,000 we cd. build one 3-bdrm house to last 150 yrs; or 2 3-bdrm houses to last each 50 yrs.

Thus, Δg t.f. of capl. is a means of releasing some of it from old sites to help bring new ones into use. The released capl. may be used to improve pot. sites; or as soc'd overhead to develop new ones. There is a danger, in latter case, of sinking too much in forms of very low t.f., and ahead of need, over the whole country, w/o foreseeing that such freezing of so much of the nation's capl. creates a surplus of unimproved sites which must remain unimproved bcs. the capl. necy. to improve them has been sunk irrecoverably in the soc'l overhead to develop them.

P, Ch. T. F. and the resource base approach

Labor unemplmt. often blamed on inadequate or depleted res. base. But a given resource base can support more emplmt. w. higher t.f.

Bunce's Elasticity of Idry prodn: emplmt. on a res. base can be enhanced by importing inputs from other sites, e.g. feed grain. That entails shifting to hi turnover prodn., where imported capl., which subs. for the deficient local resource base, turns over along w. the capl. invested in employing local labor inputs.

Where hi t.f. & empl. are achieved only by importg raw mtrls. from other sites, the aggreg. benefits are dubious, bcs. hi t.f. & emplmt are achieved on one site only at the expense of others. Thus, feeder cattle opns. feature hi turnover & emplmt per acre, but require extensive cash-grain & cow-calf opns elsewhere to complement them. There is an aggreg. benefit, however, in regions of hi resource base and hi wages exporting raw mtrls. to regions with surplus labor. And, in the face of ~~aggreg.~~ general unemployment, there is a gain in emplmt. by Δg t.f. of all lands

So res. base no limit on emplmt.

Meaning of renewal of mines

Rupture of fructifyg deed mineral deposits.

R. T.f. and the "economic base" approach

The ec. base, ~~a~~ export sector, of an area, depends not just on its resources, but how they are used. The earnings of the export sector depend not just on how much capital is in it, but ~~its t.f.~~ how fast it turns over. That is not, to be sure, getting something for nothing, for, in order to turn faster, the capital must combine with more labor and perhaps land. But it does indicate how an export deficit may be reduced w/o draining capl. from other sectors.

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~~Capital replacement - frequency and structural unemployment.~~
Unemployment and the structure of capital.

O. Outline of outline

I. Introduction

A. ~~Purpose~~ Balance of purposes, seek golden mean. Policy-oriented, but not w-in narrowest shackles of what is possible tomorrow. Seek to contribute to ec. analysis, but not as an end ~~in itself~~ rather a means to guide policy. anal. leads to recommendn. of alleviating unemplmt. by acceg. rt of cap., or rt (replmt. freq.)

B. Structural emphasis. ~~Return to classics~~. Recent yrs., heavy emphasis on spendg, pend. swung too far. In analysis, all in context of becmg money-flow fundamentalists, whether favor monetary pol. or fiscal pol. emphasis. In policy, orthodox Keynes wd. favor ↓ i.r. subsidy as long as i > 2%. ~~danger of relyg~~ reached dim. rets., achieved perilous state of influ. w/o full emplmt. Return to classic emphasis on factors other than money — not in sense of returng to a golden age & rejectg advances of intervening years, but in sense of picking up loose ends that were dropped when great swing from structural to monetary-flows gained force.

C. Mng. of structure of capl. in present context.
also note, Kiam prescription of encouraging invmt. by -Δi/ when it gets above c. 2%
of cap. stock ... the time structure ... & becomes a structural matter. also affects structure

Durability, or freq. of turnover or auto-replmt.

Location, as relates to above.

Substve & complty. relations to labor & land. Factor propors

Importance of c.f. to grs of unemplmt.

D. ~~Reasons for seeing~~ Some obvious relations of rf & empl. & even that regs no inc-creatg spendg at all.
An individ w. limd. capl. of $100 can turn it daily, gross $36,500, employ himself. Or buy land, gross $5. Cannot a nation then do same? Does it not affect emplmt each time it ~~reinvests~~ eqp. in fast or slow terms?)
Timber; residences; pipeshop.

Use to introduce concept of velocity of cap., or Replacement freq., "rf," or turnover. Measured per year, as flow/fund. (Note that is only 1st approx., bcs. when cap. turns slowly, int. becomes imptnt. and affects ratio. E.g. land never turns over, yet has positive value of inc./value. In that case, ~~Even the~~ value not a fund, solves problem. But w. others, must break flow into ~~interest~~ return on and return of cap.)

"c.f.", conversion frequency, sounds best.

D, cont. Entire n.i. filtered thru capl.. Factors detg n.i. can be organized under heading of what dets c.f. of capl.

Historical cause of profession's failure to develop concept, probly Led into blind alley by efforts to erase classical distinction of land & cap.

E. Objections to concept of cap. turnover. F. Knight, J B Clark, etc. ....

long hist. of efforts to erase distinction of land from human works & stores.

Ellis, Stigler, Spiethoff, Cassel. Clark-Knight position premised on identity of land & capl. unimportance of human vs. non-human origin. C.f. idea calls for sharp distinction, for land never turns over, its production never creates income.

F. Earlier devmt. of concept. Classics, circ. g. v. fixed cap., but never got to simple gen. concept of turnover. Austrian, pd. of produ., pioneer chimmy. BB, Hayek. "Ricardo effect", where ↓ wages → ↑ durability, expounded by pd. of produ. school. Wicksell's flash of insight – never followed up?

In Monetary field, analogous concept of money velocity developed; & then spend'g approach, now dominant. But never related to real structure of capl. Having developed historically as a rival to real approach, spend'g anal. has cleaned itself unduly of real material referent. Needed now is a re-integration

G. a point of renewed contact (can exist Rosetta stone, by which two tribes long parted can translate ea. other.)

Most Income-creat'g spend'g, proximate, is fn. of replacement. Broadly. Emphasize this fact. The point can be made in K in terms, just as K-n points can be made in =n of each. terms. Cons. not an inc.-creat'g expenditure. We treat it so only by [But (over)] mak'g implicit assm. of replacement of consumed goods.

Lign. of old goods leads to inc.-creat'g invmt. in new ones in 2 ways: a, Mak'g funds available [& correspond'g flow of goods to mkt. so they are not just infly]; b, Making space available

H. Contributes a new insight to spending analysis, immed. We now think of cons. as a most important indep. vble, tak'g initiative, lead'g cum. swings up & down.

Anal. of real cap. structure suggests cons. is limited by what is available to cons., & that is fn. of cap. structure. In war, for analogy, we saw consumers unable to ↓ cons. bcs. goods n.a., Regard diverted to war. Regard war as invmt. for future. & analogy is almost complete..

having made the point in K-n terms, note is preferable to change the terms a little to place emphasis where the analysis says it belongs: instead of burying the key indep. determinant by subsumption & cancelling out.

In K-n terms, replacement det. I, hence system.

If ~~current~~ & recent past prodn. has structured cap. so is destined to liq. slowly, then ΔC cannot thaw it much faster. Nor will there be much ΔC, endogenously. bec. replmt. has initiative & wait + create much cons. inc.

Current prevailing picture is one of passive middleman, wait'g for customers to come to him, + thus determine how fast his goods move. Not just cons. sovereignty, but cons. determinism. Reality, middleman has much choice. Retailer, e.g., can ~~always~~ choose to Δ volume by lower'g mgn. — if nature of his stock permits it. If retailer is pawn of fate, at any time, is not of cons. but of nature of invmts. If has $100,000 invested in apt. bldg. cannot shorten its life much — liqn. rate is fn. of past decision. If is in stored commods., can liq. almost at will.

So we must balance picture. Willingness to sell is equipotent w. willingness to buy; & willingness to sell is largely a fn. of rate at which ec's stock of cap. goods is prepared to release its services to users.

Adds a new dimension to our understanding of dets. of n.i. Current emphasis is on money flows, taki'g init., dominating real ec. behavior. Solve problems by Δg circ. of M. Here is real structure of cap. dominat'g m. flows. N.I. entails cycling of cap. from inputs + to storage to cons., constitutes an ~~outer~~ integral part of the cycling process, & one w. great autonomy. Is an error to use an analytical apparatus that subsumes & obscures it under other categories.

Spend'g anal. only valid if assume cap. turnover can change, & will, in response to spend'g stimuli. Yet clearly it cannot — is too much dettd. by exist'g structure. But spend'g can & does respond to changes in real replmt. needs.

Keynesian position that replacement is automatic stands in curious contrast to other cherished assumption that net new invmt. is purely autonomous, unaffected by accum. of savings. If replacement is automatic, suggests ~~these~~ funds piling up create a pressure to be invested — & then why not same hold true of savings?

Reflects failure of K. system to deal adequately w. replacement. Net new invmt. is spontaneous indep. vble. in Kn. mechanism, & repr. the prime 2dry parameter. I suggest instead a parallel system in which however autonomy rests w. gross invmt., largely a fn. of replacement. Gross invmt. then dets ~~consn~~, inc., which dets. consn ... Thus consn. demand kept in balance w. thang of cap. stock.

Has advantage that you can xlate it directly into real terms. ~~Has a mult. effect that doesn't depend on money.~~ Divide ec. into wareholders & inputs. (bus. & public.) Wareholders hire inputs, but only as fast as wares thaw. Wicksell's wine, they have great l.r. range. Actually, at any time, s.r. λ are limited. Note, is no mult. effect that depends on a) use of money: b) great flexibility of cap. stock to turn faster ... a factor which in fact must preclude multr. as gnly expounded today.

(Keynes used fascination of leverage as sales technique; but created myth)

Research need here: amend Kn. n.i. apparatus, currently used to explain dets. of n.i., to handle replacement, & recognize element of spontaneous determination in structure of capl. See back of p. e-1 for beginning. Real time structure of cap. dets. λ, hence C. Instead of replmt. as automatic result of C, C is nearly automatic result of replmt.

Also in thg., as one element, note that lign. proceeds may not be reinvested but spent on cons. μ or exported Replacement not automatic, requires incentive each time, and a place, either from a) expansion or λ b) clearing of old site or place thru scrapping,

Need for a place, impetus of demolition policy, may be my main contribution. Non-automaticity of replmt. is partly handled in K. by autonomy of net invt.

I ("EYE").

The $\frac{c}{t}f$ approach to n.i. detn. may also be linked to another approach now growing in emphasis among ecnts, the factor proportions approach. $\frac{c}{t}f = \frac{\text{flow}}{\text{fund}}$, and labor emplmt a flow. (We must decide where to meter the flow, see "D".)

Hi $\frac{c}{t}f$ of cap. corresponds to a factor mix leans on cap.; or a hi emplmt mult. assoc. w. capl. c.f., conversion freq., is recip. of conv period.

Today thinkg re factor propns. tends to neglect rf or ~~durability~~ conversion freq. transiens. activity, animation, velocity, rotation, kinesis, volution, cycling, circulation, turning, spinning, conversion Rather, in other terms, complty or competitive w. labor while extant. But cap. may displace labor in a given opn. & still be comply if requires frequent replacement. E.g., big concern re fxn. machinery, & automation, cybernation, many get carried away, analyze only sub. aspects, do not look for = tg mechanism, ee. limits to proces. Regard cap. as a column whose top surface only is usable. Rest is frozen, sterile or at least static. We can have a few tall columns, & low activity; or many short ones & hi activity. Or regard as paste in a tube; or with in a yr. of fixed outlet capac.; a frozen in a block. By whatever analogy, stress point that there is of bottleneck, a limit to rate of release of services the latter, static cap. input is same, but dynamic input greater.

Need 2 concepts of factor propns, static & dynamic. Dynamic cap. input is combo. of quantum & conv. freq.. Something like $Q \cdot f$.

Probly cap. rec. factor, $c = Q_0 \frac{i}{1-(1+i)^{-n}}$. [Rewrite, using ct instead of the period, n. $f = \frac{1}{n} = n^{-1}$, so $c = Q_0 \frac{i}{1-(1+i)^{-\frac{t}{f}}}$]

Dynamic cap. input is, in addition to ~~demand~~ an input, the demand for other inputs.

Factor proportions is a 3-way balance, not just 2. When cap. turns fast, it occupies a given spot for less time, so less land-time is mixed w. given capl. — on one site. But the cap. then spreads out to more sites. It is a way of making cap. go further,

drawing it in, so to speak, from the future, to fructify more land & labor in the present. Benefit to labor wd. come even if were no additional land available, as higher turnover of c.f. on old sites. But w. additional land available, ~~also~~ higher c.f. wd. also take form of spreading onto new lands, so on older sites there might be no more employment, simply same employment w. less capital, releasing capital for new sites.

More labor/cap. of the clean mix achieved 2 ways: a, Men work w. less durable equipment, otherwise comparable; b, Men employed in replacing cap. oftener. Thus, e.g., as to (b), 5-9% of all sites removed apply instead of 2%. Dramatize w. extreme case. All a nation's cap. might be tied up on one site by building very, very durable & expensive.

J.] By simple extension of above, may also link c.f. approach w. resource base approach. Unemployment in many areas blamed on lack of natural res. Same tract of res. support more employment when cap. on them turns faster. Renew 5-9% annually instead of 1-2%. Also, if there is abundant unemployed res., release of cap. from slow sites permits fructifying them.

[Often, however, it is the unemployed sites where cap. turns slowest, and big employment entails shifting capital to better sites. Grows complex, defer.]

K.] Relate into =n-of-exch. approach. In $MV = PT$, T becomes a variable of some independence, instead of always the result of $\pm \Delta MV$. T varies from real causes, notably the structure of capital.

Can write a real =n of exch: q. of cap. × c.f. = q. of inputs × their prices = q. of output × prices. Elaborate, eliminate double-counting, etc.

L. Integrate w. observed correlation of war & prosperity, & resultant notions ~~that~~ a) That war is necy. for prosperity; b) That prosperity w/o war requires simulating war conditions.

I agree w. (b) in part, but the qn. is, what war conditions? Standard idea is deficit finc, but war entails much else. Entails ~~capi~~ hi time-pref., rapid obsolescence, emphasis on meeting a current crisis at whatever cost, drawing on the future — thus we didn't pour capl. into roads & dams, nor even maintain them, but drew cap. out of them, putting it into cap. of very hi turnover.

L. ½ Links w. accn. prins. approach. a) As to r.f. & instability; New land deemt less highest accn. mult. b) As to govt's leverage out to land deemt.

M. Integrate w., & use to ~~explain~~ illuminate, concept of qual. over-capacity. Intersectoral overcapac. can't be qual, must refer to some other sort of imbalance. Could be intertemporal -- too much durable capac. relative to opg. cap., slow cf., thus reduc's total volume of real business, gross, transactable, or gross output possible, & pp. of customers.

Grows close to classical concept & explanation of cycles, & shortage of circ'g cap. closer yet to Hayek. Means to reconcile Hayek & Keynes. Despite seeming irreconcilability, & contrasting policy conclusions, the 2 were say'g much the same thing. Hayek favored hi cf; K. favored faster cycling — emphasized circular flow of spend'g, & means to accelerate it. H. went astray, perhaps, by forgetting cf principle, & emphasizing need for hg total cap. stock --- just as classics w. their wages-fund doctrine strayed by assuming size of the fund was crucial, w/o consider'g cf as a vble. Keynes, & esply.

some modern followers, stray by exclusive emphasis on cycling of money, ~~spending~~, the symbol of real ~~phenomena~~, cap., to neglect of real c.f. itself. Keynes himself must have bn. outlook's c.f. in those passages where he lays so much emphasis on desirability of low i.r., bec lo i.r. → lo c.f. But Hayek equally forgot it, lay'g emphasis on need for more saving, and there was in Keynes probly more of the spirit of fast turnover, a lack of fatalism.

Wickell, in scattered fragments, probly came closer than anyone to mak'g c.f. central to his anal., & we will go back to him.

M-1. Explanation of unemplmt. Shows mech. for prevent'g. What stops? Tries'g & cap. irremediably. cause: delayed renewal of better lands

N. Value of analysis to A.R.A.

1. Takes exception to purely monetary & spending analyses of unemplmt. Relates unemplmt to real structure of nation's capl. ~~as~~ in space & time (location & durability) which ARA can affect.

2. Supports ARA emphasis on salvaging sunk social overhead in older areas, by emphasizing ~~need to~~ value of economiz'g on society's ~~scarce~~ ~~fixed~~ stock of capital. Finds highest emplmt mults. there, rather than in opening new areas where everything must be built from scratch, & auxiliary cap. drawn in from other areas. (Incidentally, re criticism of ARA as unec. attempt to stabilize an obsolete status quo of location, notes that devg. western states ~~also~~ move ahead by heavy subsidies to xptn., wh, mily bases, have drawn not just labor but cap. from older areas.)

3. Emphasizes that renewal of old sites is ~~an~~ more important to ec. growth as devg. brand new ones. Proposes policies to accelerate renewal.

N,

4. Distinguishes the geographic base from man's works on it, Emphasizes role of the resource base in renewal. & proposes 4d emphasis on value of that base as stimulus to renew it

5. Refutes criticism of inflators & underconsumptionists vs. adding to "excess capacity". a) Excess is in durables, need more revolv'g cap. to compl. b) Much of "excess" is obsolete, policies will accelerate scrapping it to make way for new uses, open new invest. opps. c) Simul. fructify existg cap. and create new demand to absorb ∆ output.

6. Suggests guidelines for maxg employt mults of ARA invests, over time. Emphasize rapid ligs; complementation of existg sunk cap.

7. Leads to policies consistent w. hi-i, required anyway by balance of payments problem, thus consistent w. ~~aims of other~~ overall aims of adm. & nation. Hi-i is not only plank, ~~but~~ bcs. much is made of ∆a to accelerate renewal. But doesn't depend on low-i, & subsidy.

8. Creates a distinctive philosophy for ARA, a "revolv'g-fund" philosophy whereby money used over & over to magnify effects. Contrasts w. pork-barrel agencies who sink funds, never recover, are a net drain on Treas. Constr. strong argument for bldg. ARA at expense of other agencies, esply. pork-barrel works.

9. E

II. Development of needed analytical tools

Is more objective
Preferable to develop them in a specialized tool shop section, rather than pull them out of the hat later in the heat of some other issue. Latter approach better if object is max. reader interest, but assume here readers are exogenously motivated.

A. The 'conversion frequency' of capital, c.f.

No. of times per year that a unit of capital (atom, molecule, corpuscle, measure, lug, somathion) completes a full cycle from production to liquidation. c.f. is recip. of pd. between invmt. & liqn. There are difficulties in the concept — but that is why we have this section, to work them out.

It is hard to define or trace a unit of this kind. Operationally, we have, over a year, a ratio of sales to the mean level of the fund of capital from which sales are made, flow ÷ fund. and that ratio is the c.f. of that fund. "Turnover" in this sense is a commonplace business concept. It is usually applied only to inventories — we will extend it to durable cap. as well, where c.f. < 1. Is some precedent here, in "revolving funds", e.g. original Rec. Fund as conceived in 1902, 10 yr. pd.

B. Treatment of return on capl.

Where turnover pd. short, & c.f. hi, we appear to have a simple ratio to compute. Even w. invs. in qm. of whether value them at cost or ~~replacement~~ sale value. When turnover pd. long, & c.f. lo, becomes a paramount problem.

2 aspects. 1) Numerator On liqn., should we figure entire receipt, or deduct costs? If latter, what costs? If all, how distinguish return of cap. from return on cap?

2) Denom.
At what value? Appreciates or depreciates over time.

To solve 2d problem, ~~must~~ best to take a point of time, value fund there, & c.f. w. instantaneous rate of flow.

Leaves problem, what flow? Gross [--- except net of direct mgmt. allowance

costs, which likewise shd. be deducted from value in denom.] Res. everything else, other previous inputs, have been stored up in capl. whose turnover we now evaluate.

Might seem to ~~apply all only to~~ ~~simply all assets~~ appreciated assets. But can treat all assets so, by treating depreciation by new method.

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Aspects of proposed study of structural unemplmt.

0. Wicksell on wire; timber rotations, cattle-poultry, tobacconist, etc. Just need monetary x lation.

1. Inc-creat'g spend'g detd by replacement needs of capital-holders. They hold initiative.
   ∧ Thus depends on structure of cap. stock

✓ 2. Conc. of cap., & mnpy, reduces replacement needs

3. a region can be depressed by cap. outflow. – is failure to replace, (locally). Pockets, depressed, show in microcosm what can happen to entire economy when replacement slackens, (thus deserve study.) Leakage abroad, or ✓ overdurability of cap., make whole ec. slacken. (But part of demand must come back, for exports, else no cap. export, no liqn. possible, etc. .....

4. Scattered settlement draws too much cap. into durable distrib. nets: tall durable bldgs, &c. land subs, eventuates in overdurable cap. stock, slow replacement. In extreme, none at all — made land.

5. Factor proportions become too capitalistic. Need to spread out cap., make go farther by reduc'g durability.

✓ 6. As replaceable fringe narrows, $\frac{S}{Y} NP \rightarrow NI$?

✓ 7. $C + \bar{I} = Y$ is ~~just~~ a truism, as much so as issuance than $MV = PT$. Definitional, not causation. ✓ Leaves causation to be discovered. Where is the indep. vble? I find it in replacement schedule.

8. Universal excess capac.? Can't be excess in all, relative to each other. Must be excess relative to something else, not sectoral but probly factoral, (or monetary.) What is possible is excess of durable capac. relative to current goods.

"Replacement-cycle", "reinvestmt cycle", "The Circulation of Capital"

If there's any resistance to this approach, by editors, begin w. replacement policy, work in from there, it opens Sesame.

∴ time-structure of capital & empl. multipliers

Capital Replacement, structural Unemployment, and ARA policy.

an study of the potentialities for combatting structural unemployment thru acceleration of capital replacement, a flow of spdg approaches. How much inflm does it take to satisfy them?

I. Intro. Hv. reached dim reln w. purely monetary; Structural unemplmt. Big part, due to structure of capl. (in space; in time) Study bottlenecks on time, inevitably involves space, too. Time-structure of capl., how long it releases services. Relate to factor proportions.

Obvious common-sense observed relationships betn time-rate of replacement and employment. E.g. Timber, livestock, pipeshop, residences

Intro. concept of veloc. of capl. ≡ sales / cap. value. JB Clark & Knight deny, but refute. Ellis, Lederer, Spiethoff, Cassel

Neglected in ec. analysis. Foreshadowed by Wicksell, Hayek, classicals, but dropped for exclusive emphasis on spending. They never made transition to concept of turnover, ess substr. for cap. fctn., so emphasis was all negative, need to consume (loses)

Possible to integrate w. spdg approach, by observg invstmt income-creating spending is fn. of replacement. Both by self-fncg, & borrowers ... tightened-up banks cannot turn over loans fast. Thus much current inc. is fn. of time-rate at which

Involves altered emphasis, where replacmt is release of cap. is largely decision of seller, more than buyer. replacement, in turn detd. by structure of cap. stock. Takes the play away from mpc, & net new invstmt, as major independent determinants of spending. (over) Refutes fear that ltd output won't find mkts, that mkts are bottleneck.

Integrate w. factor proportions approach: get more emplmt by using less cap./man. Lean mix of cap: Hi empl. multiplier. That implies less land-time. 3-way proportion one key. (Need to develop math of this, shd. give striking, definitive, & surprising results.)

Integrate w. cash-balance or quantity-thy approach. In $MV = PT$, T becomes indep. vble. Also, write as real eqn. of exch. $Q \times R = C \times P$

[Q of capl × repl = real cons × prices]

Integrate w. resource-base approach. Replacement makes land available to generate emplmt more often

Reconcile w. idea that must simulate war conditions in peacetime to get full emplmt. Essence is not ΔMV, but Δ vol. of capl. – max. current output.

Reconcile w. idea of universal excess capacity. Inter-sectoral qual excess capac., meaningless. Inter-factoral, inter-temporal, all-de- has meaning if Wicksell showed, or tried to, but never finished.

Reconcile Keynes & Hayek. H. right that real structure crucial; K. that faster turnvg or cycling needed. H. went astray by pessimism, & emphg need for new cap; K. by obsession w. cyclg of inflators, why add to excess capac., & fructifyg existing cap.; break bottleneck of hi-veloc. cap.; & create Δ demand commensurate w. Δ output, all at once. Suggest ARA eschew massive p.w. – & divert funds from other agencies that do produce them. A distinctive ARA approach & philosophy.

Don't: obsession w. cyclg of m, the symbol of cap., ppo cap. itself.

Sieze oppy. to promote remedies having a real as vs. strictly monetary content. The oppy. is we have reached inflm w/o full emplmt, as Hans. says. Structure of capl. in time & space ... & how they are related

Leads to a set of actions consistent w, indeed depndg on, hi i, thus consistent w. needs of balance of payments.

less. Keynes' success was in ~~cap~~ seeing power of Ad turnover of money. But never related it to turnover of real capl., explicitly; & espoused lo-i policy, inconsistent w. it.

Hayek came nearest, but foundered on rock of "excess capac." — so might a&a why ΔS etc. when already excess capac. cap. vel. approach full empl. says speed up cap., vitalize it, don't Δ i rectly. Critics say ΔC won't inflate. But lack of fluidity capl. as intermed. resolves that.

In conventional spend'g anal. (or flow-of-funds anal.), $C \to Y$ hes replacement is assumed automatic. The step is subsumed & submerged, subordinated, in a tautology or truism, like $MV = PT$, or laws of physics, which require more than formulation somewhat compensated by weight attached to I, maybe heeding or plugging in to show.

Replacement thesis, physical structure of cap. dets Y, hence C, causation, emphasis is reversed.

[Replacement is simul. an inst eqtg. & wherewithal]

$R \equiv$ Replacement, put it in = explicitly.
$C_s \equiv$ Cons. of services

$$Y \equiv R + I + C_s$$

$$C_w + S + C_s \equiv Y$$

Erases impasse fear. Not necy to maintain Δ rate of I. If cons. Δ c&, doesn't stop next column of funibles from being released, nor 95% of last column from going into soft goods, hi-veloc. cap.

To integrate w. N.I. anal. approach, note faster replmt $\frac{\Delta GNP}{NI}$ ... but ΔNI as well! — also note must do away w. arbitrary distinction of 2 kinds of capl.

In spend'g anal., disinvmt. is ultimate tragedy, but stasis is even worse

causative relation. See Vergara on math.

II. Fns. & limitations, of rate of cap. replacement. Mechanics & math. relations, framework for anal. Dermt. of analytical tools needed.

A. Def. of concept. Relation to "pd. of production" debate. Durability of cap. stock definable. Related to ratio of sales ÷ cap. Relation to demolition — cap. has already evapd. Relation to % of land renewed each yr. Doesn't occur all at once upon demolition, but continuously, despite Spitzhoff etc., v. §1. Math. of factor proportions.

B. Necy accounting modifications. Imputation thru time. Ref. of capl. input probly as amortized value. equilibrating No automatic mysticism (expectation, etc., b.s.) No instantaneous

B-1. Automatic adjusting mechanism. No wild fluctuations, a la (over) B. (over) hiding about obsolescence of many. Cap. adapts to absorb full labor supply. fact. propn

C. Limits to Ag. inc. by speeding replacement. Opt. replacement rates from social view. Why can't whatever amt of cap. is free to speed up, speed up as much as necy to employ everyone? Physical vs. monetary flows determinants of capl. veloc. "Spending determinism" (over)

C 1. D. Opt. replacement pol. from indiv. view. Relation to (C)

D½ Relationship of turnover-freq. (tf) to intensity of land use. Concept of i.g. 2 kinds of i.g., static & dynamic. Tendency toward equal i.g.'s of both kinds on comparable land. Higher dyn. i.g. on more liquid, higher tf on

Geographical aspects. → Insert IV E. Peculiar role of nat. res. "Geographical" aspects. less liquid land.

Geologic. funds, & depletion. Opt. rates of depletion; pvt. v. social? Tendency toward non-replacement.

Effect of ↓ l.v., devaluing bldgs. Is that anin? Or leakage?

Paradox of lo-i → less cap.-intensity re land; (the more re labor)

Lorelei role imptnt ... how else explain how so much cap. gets tied up in long forms?

Site, rent, & l.v. ↓s

Ambivalent effect of hi l.v.: turn cap.-faster on site, slower on improvements. Net, probly leads to hinder cap., depending on instl. encouragement to seeks

Interdependency of replac'g cap. & man/land ratio

Rent as constraint on extension in time.

Effect of location on turnover. Higher on better land. Higher rate & much higher absol. quantity.

Disruptive effect of great cycles of l.v.

Location of best turnover, in centers of hi l.v. Hi l.v. → intensity in sense of hi turnover.

(Hamilton's intensity concept inadequate, overlooked cap. turnover) remains to circ. fact.

7. How is interruption possible when some capl.

Limit to leanness of mixture?

G. concrete e.g. Livestock. Reduce life-span 10%, etc.

II A. Translation of capl.-turnover approach into terms of other analyses, reconciliation of merely apparent differences, and summary of real policy differences in policy implns. system-

II B (over) actually effecting shifts in intgs.

(over) III. Obstacles to socially opt. replacement policy. How do we get into trap so deep that equilibrating forces don't pull us out, by a mixture lean on capl.? (Maybe yes we keep digging deeper into trap by subsidg lo-i, no-Σ, p.w.)

A. Forecasting?

No aggreg. data available on topic. Imptnce not duly appreciated. So is possible to enter pd. of inadequate lign. & replacement.

How likely? Very. Is much slack in system. No one knows whence comes capl. It seems infinite — But Is N.T.! Start more than can finish — on every hand.

What mechanism extricates us if we do?

Any possible traps, from which extrication is difficult?

A-1. Bias vs. durable pvt. invests. in propty tax. So when cap. seeks escape from hi-V uses, when factors well-employed, goes into still more durable forms: munic. bonds, fed. projects ... all land devg.

B. Some impn. problems. Dividing among profit, rent, & amn-n. (recovery)

Samuelson. Δ limited to supply of current factors.
Cap. complements labor 2 ways: a) faster turnover; b) Δ labor/res., while built.
Built-in stability: time-depreen. of bldgs, etc., "flowing-fund" res., const. repl. needs.

has physical opns infly malleable to spending decisions. Causation may go other way. Mult. effect, as try to turn cash into goods, e.g., on which money flow fundamentalism relies, cannot speed up trains, workers, etc. Is a good argument, but overplayed.

II A. In Keynes, cum. ΔY caused by tension of attempted I > S. Cd. = lg well be expressed as try's to shift from M to assets.
Indeed, in Keynes, ΔY can occur in no other way. In repl. anal., ΔY comes bcs. repl. accels. Not cum., needy. No effort to Δ cap. fonts. (+ two + hose may be tacked on.)

II B. Determinants of rate of cap. replacement.

✓ I.r. Note here is mechanism whereby Δ i.r. → Δ supply of capital.... same quantum, faster turnover. (But does it reduce aggreg. invmt?) (not if due to Δ opps.)
Δ i.r. also brings out more geologic. funds, augmenting cap. stock.
Land constraint. Opg as rent, taxes, ~~a int~~ explicit int., or implicit int.
Land incentive – hi l.v. cause land subbing, very durable
Location is ∴ a determinant. Higher ct on better land
Taxes on cap.
Nature of cap. inherited from past
Anticipations of investors, re relative yields from long & short invmts.
Instl. ... e.g. insulation of public projects from i.r.
Density of popn. Scatter requires more durables; and means lower l.v.
(But do lower l.v. mean slower turnover, or do you spread cap. over more land, & end up w. same or more land constraint? Probly extension in space offsets partly, but not wholly, the lower time-constraint.)
Complete ↔ above: fullness of use of social overhead. Is implant to provide overhead, but not in excess.

Here is a good way to put it. (over)

A-2. Instl. bias toward scatter, Sg cap. requmts. Best, progressive places do it, recognize & capture 2dry benefits. Tempted to emulate. Best...

A-3. Use of Δ l.v. as measr of project payoff. Makes a slow liquidator appear fast. bcs. political payoff is immediate. Δ's relative attractiveness of land-subs. invmts., which tend to be lo-Vol. Makes l.v. too low, slows pvt. turnover — too much land devd.

B. Buildup of unfinished projects
Log rolling
Uncoordd, unsynchronized complements. Land holdouts, spread p.w. over more land than can be absorbed.

C. Excessive infl. expectations, causing too much invt. for remote future

D. Lag in adjust'g ~~the~~ long term discounts to rising i.

E. Diversion of a sequestering invmts to future payoff to minimize current mkt impacts

1. By empires
Firms
Cities
Cartels
agr. as e.g.
Timberlands,

2. By govt.
Mily. — even that ultimately will yield, as expand lands either in nation, or sphere of influence. Research. Etc.
P.w.: hiways, water. Insulate from mkt i. (& ↑) Pressure not to produce anything of immediate salability to consumers. Only enhance l.v.
[End up w. ample invmt opps., complet'g unfinished bus.; but too little wherewithal to dev. opps., as too little cap. melts, reaches replacement stage]
Submgnl. p.w. worst problem.

F. By indivds., diversion of assets to future
Orig to growing concn. of assets, more & more in hands of those who min. adm. load by Sg durability.
Those w. low i, no constraint on extension in time of land ... land-time.

G. Reaction of govt. to unemplmt: p.w. program, bury cap. in future. (also lags. Start slowly)
also related to overpricing land, need for land subs. Extreme e.g., made land, never replaced.

H. Land-substitution, redundant
Consolidate land ec. aspects under one heading

I. Leakages out of cap. — e.g. Δ l.v. as payoff from public projects. — unless collected by creator of Δ l.v.
Military claims (& all consn .... mil. spending reduces that, some) Depletion?

Δ l.v. pirate value from bldgs.

By nature, land is very accommodating, so if we need for capl. to become more comply to labor, can abandon mgnl land, no loss. But pol. process prevents. Mgnl lands elect reps., so region, rather than people, will be served. They prevent reneging. Land supply elastic only one way. Public cap. to complement land will be forthcoming.

Nation demands too much of its capl. supply, under illusion it is limitless.

III (cont.) J. Instl. repression of i. E.g. banks, anti-usury laws, limited to some %, c. 6. So prefer easier loans -- long ones, less work.

K. Overemphasis on aggreg. nat. benefits from creating new inv. outlets as vs. desig there already there, & fructifying sunk cap. a new say's law, say-better, of induced -not invmt, but reinvmt., by amortizing, or reviving am-n of sunk cap. Salvage it, & am-n revives, goes right on to generate emplmt

L. (over)

IV. Interregional & locational aspects of structural unemplmt. (Call it "geographical")

In migration of capl. much cheaper solution than out-migration of popn. Esply. if problem is instl. stagnation, not location obsolescence.

Cap. outflow from region means lifgn. w/o replacement. Thus, local inc. = ~~cap~~ lifgn. less outflow. Thus, cap. export means local depression, sharp contrasts among regions.

Emigration helps little, bcs many emigrants take cap. -- sell homes or businesses, take money elsewhere to rebuild. Also their education, altho social cap. in that is low.

Region runs export balance, but only partly compensates for loss of local replacement. Also, lifgn. to l.v. kill replacement. Also, local lifgn. made difficult by lack of local replacement spending. Need to complete lifgn., for sake of alea, & [Like central city; cap.-exporting regions often revive, demand cap. to renew, worsen cap. shortage]

Replacement elsewhere in same co. is better than none, keeps up demand, allows full

also for new areas, which need capl., much unfin'd'd bus.

Emplmt. mults. vary by regions where invmt. creates new land, is very durable. Depg. is low.

Cap. export depressed region shows in microcosm what happens to entire ec. when cap. replacement falters; or when cap. export hurts whole country.

V. Inter-temporal aspects. Lumpy invmts, pyramids, lack sustention, cause instability.

V. Special problem of military contracts?

Quit?

Is there one? Aren't they like any other export indy? Replacement necy so long as output holds up.

VI. Measurement of relevant factors

Durability of cap. stock

Related to $\frac{NI}{GNP}$? $\frac{Nat\ Inc.}{Nat.\ Wealth}$; how treat l.v. in nat. wealth, a major conceptual problem ..... much of public sector cap. values reflected there.

Position of l.v. among total assets gives a clue.

$\frac{Inventories}{Total\ assets}$ should show a decline toward a critical pd., if my thesis is correct.

$\frac{Empl.}{Cap.}$ in different industries (including public sector)? Show that 1% of cap. fructifies 10% our empl., & v.v. at top of Lorenz curve. Sketch ranking of indies by empl. multrs.

L. Better control of monetary mechanism. Panics etc. used to keep premium on liquidity, now forgotten. ✓ Analogy of too solicitous fire control, build up to epochal one.

M. action & reaction, cyclical excesses. After suffering reverses, banks lend only short, bias system that way. Develop shortage of durables, except for old, obsolete ones. as l.v. rise, & durables develop history of success, lenders move to long loans, overdo it.

Loan based on life of land, rather than bldg

Probly based on known fact that durable shell of old bldg is good rent-collecting device, build for that future, too durable

VI (cont) Loan lengths in bank portfolios, related to life of invmts
Declining inventories ÷ fixed assets

VII. Policy conclusions, in gnrl & for ARA.

A. In gnrl, need to accelerate replacement, now & future. Need to sub. labor for land, w/o retard'g cap. cycle.
Avoid impact, sustained impact. They are compatible: durables take longer to build, too.
Prepare for future by less durable ~~bldg~~ invmts today. Benefits almost immediate. 2 aspects to less durable: softer; nearer consumer.

Durable invmts, a trap. They appear good, bcs augment ~~demand~~ factor income, demand. But do not augment real factor income; worse, they set up no Δ soft goods needing automatic replacement next pd. Don't orbit
They may create niches for more prt. invmt. of best turnover, but there are probably already surplus niches — every vacant lot is one. Niche-creating, or induced invmt., also a trap. Bottleneck is disposable cap.; not niches. Locpl. induced invmt. is Rostow's take-off into sustained ec. growth, requires get into orbit pirated.

B. How to accelerate replacement
0. ΔM, ΔV? overvalued. Infl. w/o full-emplmt. How much infln. does it take to satisfy demands of this school? cap. vel. depends on cap. structure, obdurate to MV, or spending, beyond a pt.
1. Remove bias resulting from taxes on prt. cap., no taxes on public; int. on prt., none or below-par on public

2. Make all public invmts contingent on local commitments that insure niche-filling. Matching.
Local cost-sharing is one
Locational aspect: invest on valuable land, already served w.p.w.
3. Avoid surplus p.w. that create surplus niches/so that not only does the public cap. not turn over, ~~but~~ [not only slow payoff, nearer blasting cuts & fills, at mgn. avoid subbing for land — pay off] — but prt. niches become abundant, cheap, hence cease to stimulate replacement of prt. cap. offset demonstrated weakness of ec. to start more than it can finish.
4. Avoid pd. of Δ l.v., bcs. that, too, dampens constraint of land cost to accelerate replacement. and leaks capl., as sellers regard as income.
5. Reduce concn. of assets, thus speed turnover.

6. Let ÷ rise.

7. Conquer & exorcise fears of immediate flooding mkts. ~~But~~
Balance contribns among diff. products, so ARA cap. doesn't displace other factors
from limit mkts, but has its urgent effects.

C. How to salvage ~~&~~ frozen capl.
1. capl. that is fusible, but in early stages far from consumer, may get frozen as shortage of ready liq. cap. devs, i.e. ÷ rises. Less: the kinds under p.w. & also ores in ground. Need a solvent.

D. ~~Where ARA fits in~~ | Implns for ARA
C-1, salvage cap. in mines, fusible, but frozen by hi ÷. If any lo-÷ is to be done, use it here, to salvage capl., not sink more | Need to release value to consn., thus net releasing cap. to employ, quote real incomes.
C-1. How to avoid leakage of cap. Collect l.v. Δs. avoid lo-i.

Factor propns, adjust them. Lean mix: sub. labor for cap., & cap. for land.

Invest on good land, lo i.q., hi freq. Lowest freq. is p.w. bing'g in mgnl. land. & freq. highest at center, lo xptn costs. Revitalize them.
See 117, p. 39-40.
86, p. 32

D. (cont.)

Lend ~~only~~ mainly short-term. More than new sites, need new bldgs on idle sites; more than new bldgs, need new machines in idle bldgs; more than new machines, need new mtls. running thru idle machines.

Lend long only to break mopics. Or to provide p.w. for bldgs already built. 2dry benefic lies not in new demands for capl., but new supplies.

. offset local bias vs. people. Matching requirements stip. in terms of jobs, popn., etc., not fixed cap.

Misc. ideas. From Red File, AI, and c. files to be sure I have the ideas there.

see p. 33 for leg.

43. Initial impact not enough? Not anything. Any spending gives that. Sustained impact vital. Is no impact until gvt. invmt is ligd & replaced – then is self-sustaining, revolv'g fund, in orbit.

44. Depletion of mines. As near finis, less is inc., more is depln, so holder holds back more, prodn becomes more variable.

But replacement spend'g rises – tho probly elsewhere.

(Here is large class of fusibles whose fus'g rate is not detd technically, may respond to ΔMV)

Leakage of cap. Payment for depln. is, just like payment for site. To seller is income; to buyer is capl. Dubious – is consn. in end, no? (Some, to seller, may be recovery of devmt costs, if they are his costs. & from external causes are income; also

Mining exemplifies several things to avoid.

1. Slow payout from devmt costs: exploration, access roads, etc.
2. No replacement, or incomplete. Comply. input employed entirely in ligg
3. Unstable rate of lign.

45. Avoid flood'g mkts? Contrary. Flood them fast, get replacement.

46. 'Fusible' differs from 'consumable'. Fusible cap. in early stages of prodn. contributes to next. Are several stages, so ec. requires 3-4 times as much fusible cap. as F, or C; but just enough consumable for C.

There is no net. need of "solvent" to fuse these; for owners replace them, don't consume. Solvent shortage wd. come only if they disinvested by consg cap. The gross need of solvent is supplied automatically, as each stage invests in anticipn. of sales, & thus in aggreg. supplying the aggreg. need for funds (over) If ↓ rise, they can neither fuse nor lig. these, so they just stop replac'g. Don't cons., but replace w. fusibles. Bottleneck is that this is slow – & sometimes impossible, as they lose all value

In the series or chain, the significant readiness of cap. is readiness for final consumption. Ore pellets ready for conversion to steel are still far from the final release of consumption. And conversion from pellets to steel does not release funds to hire factors.

Keynes cancels out all the intermed. xctns for the net ends, & as to the several stages, is probly ok. He also cancels out even one stage of replacement. however, thus cancels out the motor.

As to length of life, it is not the physical durability alone of the item that counts, but also stages to final cons. Until item sold to final consumer, intermed. sales absorb invmt. That absorbtion offsets replacement invmt.

Our food mkty structure absorbs much more capl. now than before, e.g. bes of more stages.

47. Sludge; mush, ~~liquid~~

~~Molly — why many owners? Re centralizn.~~ Mature realizn can't run away forever

48. ΔM solve? Can help:

a. If factors Δcb, extend credit

b. If whs Δcb, --- those who hv. been stockpiling & holding out.

c. If no one Δcb easily, ΔP, create cap. by confiscatg other M

d. " " " " , ΔV, with Δ real turnover. Sounds good. Is what justifies monetary-fiscal intervention. When put replacement falters, cum. downturn threatens, intervene & prevent.

Unpleasant side-effects? Habit-forming?

Analogy of fire control, builds up for bigger fire. Downspins served to warn vs something, & correct it. Something was over lengthening of capl.; overpricg land, etc.

Turnover can be Δd, not just by whs or others tryg to create cap., but tryg to turn cash into real assets: wares. Limited by physical problems.

So keep replacement rolling, for a while, by causing flight from $. Trouble is, retribution. Later, flight from wares; or fall of fn. exch.

{The existence of multiplier effects is perhaps the evidence of redundant M. If money were credit, it wd. be issued only to those lending real value, wanting to Δ assets gmly. & c.b. part-ly. ..... ?}

49. Small liq. panics serve therapeutic & salutary fn. Check tendency to lengthen cap. (harden, indurate, make durable, inter, entomb; slow, viscify). Now we check liq. panics, small ones. Thus permit greater diversion of cap. to durable forms. Build up for crisis bigger than protective mechanism can handle.

50. Unrolling carpet, analogy of land devmt.

Better is biol. growth. Blood carries bldg mtls. to end of line, line lengthens.

51. Diseim. nibbles at fusible fringe of all cap; & doesn't replace it. Whs need it even sell to factors. Sell to ea. other; same as consuming their own cap.

Diseim. is devastating. But no more so than non-~~replacement~~ turnover, or stasis, vegetation, dormancy, ~~slow~~ deceleration. Diseim. is liqn. w/o replacement; & my study problem is non-liqn, non-replmt.

Cap. consists of a refractory mass solid core & fusible fringe. Rpy, revns per yr, depend on ratio $\frac{\text{fusible}}{\text{refractory}}$, where fusible ≡ what can be fused in one yr. of revolving fund Thus can work into impasses based on gross physical facts; cumulative results of past policies, massively frozen in gross mtrl. form, hard to overcome by legerdemain.

Can convert fixed to fusible cap. only at fixed, ~~productive~~ rate, predestined by fusibility ratio.

This can be an orderly retreat, or a rout & catastrophe.

Cum. deceleration ($-\int$, or just $\int$, vs. $+\int$ or just $\int$) occurs when whs $-\Delta$ spending in antcn of less ~~fusing~~ fusing. So factors buy less, but also produce less, so there is no ~~###~~ $-\Delta$ of fusibles for next time. (That sounds more like stagnation than cumulation. Perhaps the cum. processes are monetary.) Not until factors are diverted from durables to fusibles.

Cum. dec. results from trying to reduce ~~loans~~ whgs. In liq. tenseness, whs try to $-\Delta$ durable hldgs: by selling; & by not replacing. Thus get double failure of replmt: a, bcs less fusible comes; b, bcs the fusibles from durables isn't replaced; c, also, cease expanding durables.

This cd. be corrected, if fusings from all sources are used to replace w. fusibles. (b) above has no force if non-replacement of durables is compensated by replacing them w. fusibles.

(d) Relative value of durables drops, — esp. the remote parts, but also the fusible parts. In fact, much of the durables aren't even

51, (cont.)

used, are "surplus capacity." To fuse off this surplus requires compl-n of other cap. -- not to 'carry' amortn, but to use the plant. So, in this sense, a 'solvent' is needed to fuse or liquidate .... liquefy better --- this frozen capl. For shortage of solvent, fusible fringe of durables is devalued, yields less value when liquefies. For lack of liq. capl., early-stage capl. that is fusible but not consumable may not be able to work its way thru to consumables.

(e) P.w. programs, let cap. be replaced, but in wrong forms

(f) Retaining efforts -- RR, NRA, aaa, ... to stockpile goods, avoid liqn. By cfsn, ΔM is a nat. virtue. Here is essence of cumm rovet: stop circn. of cap., revrg of fund. Anal personalities, constipate the ec. Avoid spend'g, bcs. that wd. add to stockpiles; avoid sell'g, bcs. that wd. lower P. Like a blood clot — threatens a coronary. Stasis — means much same as constipatn.

Cumm. $\downarrow$ via whs try'g to $\downarrow$ invs. has limits. Bcs. they don't really $\downarrow$ C .... they consume them themselves. I.e. instead of replac'g they spend on cons. Doesn't cumm. but can keep on going.

This is one result of higher l.v. Much cum-n becomes $\downarrow$, replacement changes to C. Live off fat, hire fewer factors. But also implied is that rentals, formerly cum-n, become a factor inc. -- land gets higher share. This is concealed by lagging accounting.

So consumers are hiring more direct services — of land. Much cap. is destroyed. Less shares remain to pay wages.

Is no way to create more land. But can sub. cap for land. So, besides destroy'g cap., the hi l.v. cause more to be sunk in durables. Thus further hardening cap. stock, ... sealing the model of bus. cycle. Even w/o a crash, reduc'g welfare greatly.

52. Pw. that bring in excess land, suggest is no land shortage aspect to problem. Not so. sequester much cap. into future, concs. it on a few lands. The bypassed etc. lands are not available to labor, even if cheap, bcs. lack cap. to fructify labor on those lands.

53. As people disperse, requires more cap. to link them: roads, pipes, wire, & also inventories — personal services become rarer, becomes more ec. to impress labor on matter. automatic dishwasher replaces maid, etc. Not that there aren't potential maids, cheaper. They live too far away.

Is also dearth of social barriers, loss of human contacts, tends impoverish life.

54. Are 2 senses of labor-complmn by cap.

a, Faster turnover

b, Δ labor/land. Explore (b)

"Compl-n" implies the 3rd fixed factor; or fixed demand. Otherwise, fm. mach. that Δs output/man wd. not sub. for labor.

In aggreg. picture, demand expansible, land not.

If cap. Δ output/land, w. const. output/labor, complements labor, displaces land. Have more men/acre. If end up w. same men/land, is neutral. If fewer, is labor-displacg --- [unless it brings in new lands previously unusable, which take up the slack, but then it Δs labor/land on the 'new' lands, which had some use before & are now merely intensified, so that fits the gen'l rule.]

To give concept meaning, fixed resource base is prerequisite.

An innovn. in a particular indy. cd. displace both labor & land: Δ output/acre and /man, but reduce use of both labor & land. Res. mkt. is limits. ~~"Not displacement"~~ vs. "Replace from mkts", vs. "displace from compltmt."

54. (cont.)

ARA shd. eschew invmts. that displace labor from ress., or, even, are neutral. Cannot avoid displcg both labor & ress. from mkts. Is ok, if program is balanced, contribute to many sectors, Δ mkts.

52 (resumed).

Interstitial land may drop much in price, but still be overpriced, if society lacks cap. to dev. it.

55. Use e.g. of cattle. Are X m. head in U.S. If reduce life by ~~[illegible]~~ $\frac{1}{3}$, reduce numbers by $\frac{1}{3}$, or nearly so. Not reduce nos. slaughtered, but static no. existing at any one time.

Thus reduce land; but use same labor. Work out details as graphic e.g. to make points concrete, realistic, vivid, salable.

56. A constipated economy. ΔM is a laxative. Like other laxatives, danger of habit-formg. Use sparingly, w. discretion.

How much inflation does it take to satisfy its proponents? Double p-level since '40, problems still w. us.

57. Real replacement approach shows Hayek & Keynes had much in common! Both sought faster circn. of cap. stock

58. Trouble w. govt. invmt, aren't allowed to produce anything they can sell. Can offset disinvmt. elsewhere, for one go-round. Beat them, no automatic replacement. No light.

Pressure everywhere is to block. light — w/o realizg that also blocks replmt.

59. —

54. (resumed)

Factor-displacing effect is w. output const. Thus fertilizer may Δ labor/land, but also bring in new land (same thing, really), ~~but also~~ thus Δ output much, and proving land-compl. But w. const. output, is land-subst.

59. Given unemployed labor, cap. shd. adjust, displace land by labor. More comply. to ~~both~~ by faster turnover; & to labor by assuming land-displacing forms (not really only half as long. Double turnover uses twice the land, but

Problems:

a. Type 2's also unemployed land

b. Scattered land, absorbs much cap. to tie together

c. Frozen cap.

d. Etc. . . . .

~~54.~~ 54. (resumed)

Land-displacement shd. equilibrate, when is unemployed labor. More labor/land. Trouble is, process leads to freezing cap., slows turnover so is less comply to ~~both~~ labor ~~& land~~ in sense (a), p. 21.

60. What is bottleneck to Δ output? Keynes sold us on impasse based on behavior of M. Best is too small a tail to wag so big a dog. To large extent, behavior of M depends on physical facts re structure of cap.

Max. output is: Repl. + services + cap.-formn. When 1 falters, 2 & 3 can't take up whole slack. There is ceiling on output.

Bottleneck is not a fund that circs. at a speed that can be varied quickly. Is a flow - or seepage a trickle - of real goods becoming available. Liq. cap. Ex. cannot Δ output beyond limit to set. Must have real liq. cap. to carry current output

61. ARA shd. seek to fructify presently sunk capl., provide solvents for its lign. Tiebout, thinking in terms of need'g invmt. opps., says empl. mults. highest if invest in growing area, create need for more complements. But that assumes no cap. shortage — & if that is case, anything ARA does is good. If problem were really that simple, I doubt that it would have gone so long unsolved.

To Δ acceptability of my project, stress that aspect. Thus Δ structural unemplmt. etc.

When mobile cap. leaves an area, it leaves much stranded capl.

If invmt. opps. were bottleneck, then dev'g new areas is good. But at 6½%, disposable capl is bonkers. Induced local invmt. is not ∴ net Δ nat. invmt, but pirated invmt. (alienated, ...). Net effect not clear until after initial outlay, & is likely to be bad.

So direct invmts toward thaw'g assets already frozen, not pour'g more lig. cap. into ice-maker.

62. When Δ l.v. is regarded as payoff of cap. invmt. in p.w., sale of site ligs. cap., recirculates. E.g. put. 'indl. district.' That is faster, even, than munic. repayment via land taxes (here, exog. Δ l.v. might sometimes Δ cap. func. by help'g indl. dist. pay off? No, at best neutral, bec. bugger has to destroy cap. to buy). Land sales by p.u.; taxes to munic.

63. More than we need new sites, need new bldgs on sites already prepared:
.. .. bldgs. .. .. circ. cap. in bldgs already in "excess capac."

64. Need offsets for local bias vs. people. Localities want durable fixed cap. they can tax, not people they must tend.

ARA subsidies shd. ∴ be based on Δ popn — not substations. Matching requirements cd. be in terms of people or jobs, not capl.

65. Bldgs are a 3d kind of res., not same as either fund or flow. They depreciate, like funds; but much of depreen is like flow, a fn. of time. They are "flowing-fund res."; like a tank w. a leak.

Time-depreen is the friend of stability & emplmt. Must use flowing funds before too late. Is otherwise w. mines

66. Ligg cap. not only stims. replacement: also requires emplmt directly. E.g. manning factories, cutting trees, mining ore. And supplies mtrls. for other employment. (altho, as to that, it requires other invmt to absorb those mtrls, so net gain is dubious)

67. "Quick impact" concept. If sink $1m into one durable pyramid, take 10 yrs to bld; put into retail inventories, spend immedly (if have excess capac.), & by 10 yrs, replaced selves many times.

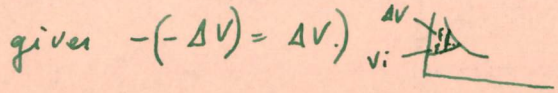
What can ARA do correspondg to retail inventories? Force. business to use idle plants; restock & use stores. Production credit gently, short term credit

68. Banks, all lenders, may bias system toward fusible, at some stages, by short terms. Late cycle they change, go into long term loans. Hi l.v. push that way.

Bldg. taxes, too, bias that way maybe, but late boom, overcome by subsidies, offsets -- & flow of cap. into tax-exempt p.w.

69. Rise of l.v. lets l wldrs get long loans, erect durabler bldgs, slow turnover.

70. Cap. input is not V_i; but $[-\Delta V. + V_i]$ (+here are additive, since ΔV is neg.; given $-(-\Delta V) = \Delta V$.)



By reducing turnover of a fixed stock of cap., V_i remains same (or rises if Δi). $|\Delta V|$ gets smaller. So nation's cap. input wanes. Problems attributed to excess cap., due to deficit.

71. If ΔM injected in such way to keep $lo\ i$, won't $\Delta \mathcal{I}$.

72. There are several intermed. stages of capl. ~~freezing~~ melting & ~~refreezing~~ hardening, before final consum. So gross fixing must = 4 × C or so; probly nearer 10 × .... isn't that relation of xctns V to inc. V?

73. Wax, a good analogy for capl. It softens, melts & hardens.

72 (resumed) a 10-stage model differs from my 1-stage in lag more slacks. Spend'g by whs at every stage creates inc., spent at stage 10. So invmt. at st. 10 doesn't draw down st. 10 immedly, but after lag. A highway bldg, e.g. Better, Sd oil prospect'g equipment, or factory for bldg same, or prepar'g site for said factory ... don't immedly S demand at st. 1. Draw cap. from later stages? Not necly. But demand at st. 10 is not regulated just by replmt invmt. of st. 10, but of all stages. This complicates regulatory mechanism. Brodey.

Also means S cap. reqmts for new starts not realized for some time.

14. Cap., ↑, compls. more labor, & land, too.

Hi wages prompt lengthening or hardening cap; so do hi l.v. & rents? X
Eeze on land, subs. cap. for land. ~~Thus hi l.v. disemploy labor.~~

But why do hi l.v. prompt ~~shorter or~~ hardening cap? So given cap. covers less land. But that may be false -- w. harder bldg, poly cap. input is less, bes less depreen. Maybe hi l.v. cause quick turnover, ... thus subs labor as well as cap. for land. And brings in more land. Seems more plausible.

Is very imptnt to figure out which!

Insofar as land is an initial input, influence parallel to that of labor. But as a part of final output, has reverse influence. ✓
Hi salvage value of land is simul. w. & shd. hv. same effect as low regen. costs next time.

Hi l.v. call for hi depreen input; hi labor-in-constr. input. Means bigger bldgs, & faster rebuilding. both.

So hi l.v. employ labor.

Problem is when ec. builds at hi l.v., then they drop, freeze the cap. Even that not unqualified ill, bes by dropping they valorize cap? No, not if r.e. value drops by full amt of -Δ l.v.

75. Keynes, anomaly. Emphasized s.r. Suggests hi time-pref. Yet favored 0-int. rate, which implies deferring cons. indefly.

76. E.g. of the delivery trucks. Can buy 5 @ $2,000, last 2 yrs; or one @ 8,000; a Rolls R., last 10 yrs., do 1/5 the business (& same $2,000)

One firm, seeing gain, cd. convert to 5 Rolls. Do same business. Employ as many auto makers, two --- or 80% as many, anyway.

But entire ec. cannot shift to RR, w/o Δg cap. ~~Δ~~ 4x. If tries to, or does, cuts down val., emplmt. to 1/4.

✓ Only when hired factors are fully empld turning over stock of cap., is it time to harden stock (protract, retard, impact, decelerate, indurate, pack, compress, squeeze, ~~anneal~~ petrify, ossify, temper) & protract its life.

✓ Labor ~~may~~ of mankind may be interpd as a labor of turning over the ~~ec's.~~ ~~is~~ capl. Slowg turnover disemploys labor.

77. In depression, seek liqty, but hardened cap. stock is adamant

78. Candles analogue. Can make one, last all yr., or 25, one week each The one is grand, but get less light, & in fewer places. — & disemploy workers Not only disemploy in candle ~~&~~ mfr., but in using rooms lighted by candles.

79. When land goes hi, causes land-complg cap. to revolve faster; but land-subbing cap. to revolve slower. Or at least to build more land-subbg capl., & it does revolve slow.

Dear labor makes cap. revolve slower, bcs. durability of cap. is a labor-subst. Effect of dear land not parallel, bcs. land input is continual under cap. But land effect more complex, bcs. cap. can sub. for land in networks Hdg. also in using 3d dim., so dear land also net leads to harder cap.

19., (cont). Altho that depends on instl. possibilities of substn. Our society has too many, gets hardening net ... which destroys [i.e., destroys the subst'g cap., & freezes the compl. cap. on devalued land.

80. "The Revolution of Capital." Eye-catching title.

81. Instead of melting, fusing [i.e., liquefying], capl, "release" it.

82. Indurating cap. is subst'g cap for labor. Say triple life of house by doubling initial cost. But that does not sub. cap. for land, bec land input endures w. the house. In fact, makes it more land-intensive, subs land for cap., bec. we doubled the initial cap. & triple the land-time. That may be disputed, but clearly we are subbing land for labor.

As to subbing land for cap., that calls for more thought. Begin w. more static cap/land; but have less dynamic cap/land, i.e. less depree. Depends on proper msre of the capl. input.

Agenda. . . .

Needs work. Systematize. Very promising, could be definitive

If you figure cap. input by annualizing initial input, then at higher i, get higher annualized cap. input (& lower rent)

$$C_a = \frac{i\,C_o(1+i)^{t-o}}{(1+i)^t - 1} = \frac{C_o\,i}{1-(1+i)^{-t}}$$

But only a little higher?

C_a varies directly w. i, in tempered fashion, for any t; but at higher i, get lower t.

That does seem a good way to figure the cap. input, anyway.

Annualize.

Now if we ΔC_o, & simul. Δt, [i.e. harden capl.—] they offset. Which prevails? Ed. be either, depend'g on specifics. Which is chosen will depend on cause.

a) If rent const., exog. i lower, will sub. cap. for land. C_a rises

X Means t will not Δ enough to offset ΔC_o, i must fall. (Also, lower i wd. tend to Δ rent ... sometime work that out)

b) If i const., exog. rent lower, will sub. land for cap., C_a falls. Means C_o falls, t rises, [or doesn't fall enough to offset lower C_o ... but w. lower rent, likely to rise]

Note there aren't perfect counterparts.

✓ Work out a table, wd. be interesting.

Lower i causes 2 adjustments, then: Δ durability; ΔC_o/acre.

But by far the greater adj. is in ΔI. House is telescope of shells, innermost, hardest parts are most $\dot{i}$-elastic. Early ones also affected some by lower $\dot{i}$, but less.

So if $-\Delta i$ is to cause both Δt, and ΔC_a, must $\Delta\Delta C_o$. Probly will Δt, and ΔC_o, but only moderately, and so $-\Delta C_a$. Thus proving my point that low-$\dot{i}$ uses less cap/ane!!! Brodez!!!

✓ 83. In Keynes, replacement is automatic, requires attempt to Δ capl. funtn, ΔI, to

ΔY.

In Reinvmt. anal., get ΔY from faster release of & consequent (tho not subsequent ...'s simul) replacement of cap. Not S & I are little fringe phenomena, not mainspring.

Let S & I be constant, & no attempt to ΔI. Are we stuck w. unemplmt? Impasse of Keynes, where $C_{t+s} = C_{t+1}$? No, unemplmt. Δs $\dot{i}$, shortens invmt. plans, speeds release & replacement.

Now, suppose $\Delta Y \rightarrow \Delta S$ by factor. Leads to automatic ΔI by whs (Swedish ex post ΔI) Not an impasse — gives signal for next use of repl. funds to go

84. Replacement is consequent on release, but not subsequent to it. Replmt occurs before or simul. w. release, in antic. of it. Release is a decision largely of seller, more than buyer.‡ Indeed, is merely a decision of past investors, who determined releasibility schedules of existing cap. stock.

(83) into more durable forms. Of course that wd. reduce real turnover next time.

So I cannot refute K. by assuming const S & I? Well, can half refute. Can show big $\pm\Delta Y$ w/o any impulse from ΔI. But refuting the impasse of $S = f(Y)$ is another gp. Involves assm. that a pickup of bus. causes $\downarrow$ Δ liq.-pref. Surely, opposite is true.

K. assumes bus. pickup results only from ΔI, attempt to create capl. Reinv. anal. notes it results from $\uparrow$, attempt to replace capl. Recognizes that Δ liq. pref. cd. thwart it, but a) Doubts such wd. occur, while K. makes it automatic. By using ΔI as generator, he exhausts that as absorber of ΔS. But w. Δ Repl. as

‡ Altho buyers' influence price, by their reticence or eagerness

(83) quntr., can have induced ΔI absorb ΔS. Isn't that what usually happens in an inventory boom? Δs permits greater Δy than w/o it
Reinv. anal. involves no presumption that ΔI must henden capl.
Might just Δ invies.
b) If Δ liq. pref. does occur, can be handled by $-\Delta P$ or ΔM. Is not $= \infty$.

✓ 84. Invy. cycle shows replmt. not automatic. Are accm. elements. Can work down invys. So don't get completely carried away!

85.

86. Hi volume opns. need central locations. So ARE shd n't try to invest on mgnl lands. They absorb much cap., revolve slowly. Hi static i.q., lo dynamic? No, mgnl lands are hi dynamic i.q. May be still higher static. Surely are if count social cost.

(Express factor propns. as i.q. of land. Static i.q. is measd cap. by quantity; dynamic, by depren & replmt.) (i.e. by am-d value, or am-d = int.)

≤, cap. input, dynamic, $\leq C_0 \frac{i}{1-(1+i)^{-n}}$

The more valuable the land, the lower the static i.q. Even dynamic i.q. is lower, at least on fm land, & cap. revolves faster besides to fructify that good lo i.q. land. To be sure, it won't absorb so much capital . . . .

87. Einarsen's replacement thy. never seems to have heard of a sinking-fund. Replacement occurs all at once when machine is scrapped & replaced. None of basic thys – Marx, Robertson, Tugan. Ben., Spiethoff, Cassel, – are just like mine. All seem to share this false discrete concept of replacement, ... which also reflects emphasis on invent apps.; neglect of sinews of invent. Is something to that. Ben old cap. preempts land until demolished. But ~~is also so~~ ~~invest~~ replacement of cap. begins immedly., in aggreg., from ~~depr~~ am-n.

88. Einarsen finds reinvst. dominates first part of upswing; new invst the latter. p. 95

89. War is demolition – of the empty shells of obsolete capl. which are preempting valuable space. Hence effect in releasing sites outweighs loss of capital, is a net gain thereby! Hence postwar prosperity.

Kuznets, S., Capl. in the Am. Economy, P.U.P., 1961

~~Wicksell, Lectures~~ (etc.?) ~~On real theories; mr vs. m.r~~

90. Ley: Rt inc. Distr., Hayek v. Knight. I think I shd. side w. Hayek. re 98, p. 35.
Hotelling, JASA 9-25, 'a qual math. thy of depreciation.'
Clark, J B, Distr. of Wealth, ch. 9-12, 20, criticism of Bohm-Bawerk.
Clark, J M JPE '31. Debate w. Frisch re "Cap. prodn. & cons. taking."

Schiff, Erich, Kapitalbildung u. Kapitalaufzehrung im Konjunkturverlauf
Wien, '33, Osterreichen. fur Konjunkturforschung.

~~Spiethoff, "Overproduction", ESS vol. XI~~ says nothing. Very disappointing.

c.f. Bickerdike, EJ, 9-14.

G. Halm, book from Reed also Econ. 1940. also there of Berkson
Prihram, K. Die Städtische Grundrente im Konjunkturverlauf. Bonn, 1930.
M. Hill 'Pd. of Prodn. L & Ind. Fluctn": EJ '33
R. Nurkse, Structure of Prodn., RES Studies, 6-35
A. Schweitzer, Spiethoff's Thy. of the Bus. Cycle, U. of Wyo. Publns,
Vol. VIII, No. 1, 4-44.
N. Kalder, Cap. Intensity & the Trade Cycle, in: Economics, 2-39.
(Economica?)
Robbins, L. The Gt. Depression
Mill, J.S., 'The Influenced Cons. on Prodn'; Essay 2, Essays in Some Unsettled Issues ...

91. Implicit in all u.i. detn. thy. is assumption that liqn. is at option of buyers, that investors take all signals from buyers, etc.

Change entire picture if assume some initiative from other sources — sellers decide when to sell, & provide cons. w. new money by invest'g for replacement in advance, or "simul" — i.e. in same short period. Sellers' decision in turn detd. by "ripeness" of capl.

"Ripening" better term than "melting", fusing, etc?
Maturing

92. Direct services of labor & land employ those 2 factors w/o any cap. turnover: embodiment, & release. Sometimes together. Labor requires land to render services. But sometimes land alone. Resid. land.

In housing boom, much land so taken. During constn, employs labor, but after constn, is lost to labor.

Paying rent on this land absorbs growing share of income. In form of int. on mortgages. Reduces demand for labor. Never needs replacement.

The more inc. is spent this way, the less need for cap. to turn over. Releases cap. for durable uses — also labor. And one durable use is bldg. land-subs.

Such land-demand is magnified by antic. ΔP.

Land-sub. boom temporarily reemploys labor. But leaves us w. even more land-rent to pay, slower replacement.

Brodey.

93. Cap. can escape from dear labor by ↑g durability. Can't thus escape from dear land. Can, however, "j'ine 'em," create new land.

94. Hayek has an unexpected ↓ cons. check boom. Some truth, but perhaps fall of cap. funtn. is truer. Cons. may also fall, absolutely. Fall of replacement is basic.

95. Many ecots assoc. "overinvmt" w. the acc. princ.

96. If ↓ too slow, then fewer goods come to mkt. Ex. as counterpart lowers inc, so less M demand comes to mkt. If try to remedy by ↑M, just bring on infl. w/o full emplmt. Is a bottleneck betwn cons. & producer, & it is slow turnover of real cap. stock, which is the medium by which they reach each other. If that is bottleneck, no good to ↑M, etc.

97. 'Easy money' school at fault for funnelling m into durables. We need hi i.r., get am-n flows back into softer goods.

H. G. Brown is easy M school! So were monetary theorists. Fiscal policyers move cap. into hard goods by direct govt. invmt., no better.

Easy money people have ben. w. us a long time — not a modern invention. Populists; greenbackers; wildcat banks; & so on back to Rome. Underconsumption, too. Mill refers to stress on consumption which dominated thinking up to his day

Is a conceit of many econ. that modern anal. somehow sets us apart from classics, meres, etc. — but behind screen of pretention, counterfeit accuracy, apg of physical sciences, lie same old doctrines, drawg strength probly less from their intrinsic merits as from subconscious confirmation they achieve by virtue of being circd. like old wives tales for centuries.

98. Knight says capl. is all a perpetuity, RTID ("Cap. & Int." from Encycl. Brittanica, '46.) sounds like Stigler.

Hayek distinguishes durability of cap., relates to turnover of cap.

This may be best lever for introducg article. Note how Knight view throws out turnover.

Besides Knight, this opens up for attack H. Ellis, Zt.s.t.f. Nat-Ökon., 1935, vol. vi.; Nurkse; & S. Carlson. JB Clark. Stigler.

Proceed from this to show hi importance of real turnover.

99. Disinvmt. is bad for emplmt., but even that is not as bad as standing still, doing nothing.

Some disinvmt. is maja source of emplmt: depletion of mines. also of raw mtrls. All disinvmt. involves some emplmt.

100. Refusal of sellers to extend credit to buyers is manifestn of shortage of current cap. They either don't have it; or they lose faith.--- which also slows turnover of what tot. capl. there is, same as making it harder.

101. Paradox of hi $\underline{i}$ and glut of cap. Very possible. Result of overhanging cap. stock, so curr.n is too small to meet current demands. Thus "overcapac." & hi $\underline{i}$ come simul. --- what other thg can explain that?

Current savings are small part of total supply of funds seeking outlets.

102. Wicksell distinguished nat. rate ($= \cong$ m.e.c.) vs. money rate, got cum. movements from their differences. Did he relate this to real turnover? Better reread him & see! Keynes etc. stems pretty directly from this. Hayek & Keynes both drew from Wicksell.
Wicksell pioneered idea of aggreg. demand, vs. classic idea of all demand relatns.

103. More
If Durable cap. goods take cap. out of circn, & also land under it.
If are producers goods, cumpl. labor in other ways. If are residences, complement labor very little. Thus, resid. boom can choke a city, ruin its base.

104. Bastiat wrote of 'fallacy of the Broken Window.' Best: is not entirely a fallacy — demolish house, release site. House may be worthless, is net gain.

105. As larger % of cap. becomes durable, some bookkeep'g will show higher deprec. charges. But that is fruit of fallacy of artificially divid'g cap. into fixed & circ'g.

Today, Kuznets &c. write of higher deprecn. Meet fallacy.

106. Vocab. "flux", fluxing, fluxable fungs of capl.

Unit of capl: "pellet"

"Ready-to-fuse" capl. is just "ready capl." Or 'ripe'. On tap. Disposable. On call. Convertable

107. Re bldg. taxes, they on balance slow down cap. circn. To accel., wd. have to dis; but they clearly don't. They do make much cap. available for p.w., & interstate sector gnrly, tax-free, glacial pace

108. Suppose ΔM, but more things to buy are not ready, available, on disposal. Do they push up prices? We saw in 1941-45, they hoard money on unbelievable scale. ~~Also~~ Confuting much we read elsewhere about remarkable power of ΔM.

Price control etc. helped.

But for present anal., point is, ΔM alone cd. not ~~squeeze~~ draw blood from stones. Cd't speed real cap. veloc. much, if at all.

109. Galbraith a bete noire in several ways. He reps. so much that is wrong w. modern thinking

a) Countervailing power

b) Limitless pot. tax-paying capacity, divert more res. to public.

c) affluent society, can accept endless new stents, over commitments

d) W. all those errors, isn't it likely his "discg. system" has misled me in understanding of that era? (see 108)

110. Fast-turning, slow-turning, faster-turning, etc. capital. Capl. "turns", shorter than "turns over".

Circulable, releasable, turnable capl.

To cycle, use as verb. Also, the cap. cycle, like the hydrologic cycle.

Capl. never tires: keep it busy.

111. Coagulate, coagulant.

112. Hi i are an anti-coagulant, keep ec's life-blood circg. (also leaking?)

113. Heller et al. want lo i "to encourage invmt." But can only encourage durable invmt., thus discourag'g reinv't. next month (period). Immediate benefit, if any, quickly offset, requiring more of same, & so on in vicious trap. Obsessed w. spending, mgmt. of abstract symbols, lose sight of concrete values being manipd., & their reactions thereto. i & capl. are like temperature & ice. Hi-i melts cap. & recirculates it.

Vicious trap, bring back ice-age, circ. capl. at glacial speeds.

114. Lo-i mean less cap./acre. My early efforts to show this lacked a time-dimension. But in Kindergiel w. ann-n =n.

Land value = $\frac{a}{i}$

Cap. value = $\frac{a(1-[1+i]^{-t}]}{i}$, less affected by i, depending on t

another imptnt. aspect, regard cap. input as annual =nt of a C_o. Then, w. lower i, C_o will be higher, but so will t, and

$C_a \left\{ = \frac{i C_o (1+i)^{t-0}}{(1+i)^t - 1} = \frac{C_o i}{1-(1+i)^{-t}} \right\}$ will probably be lower.

Task is to prove it will be lower.

Note that C_a seems equivalent to $C_i + |\Delta V|$, i.e. int. + depreen.

If $t = \infty$, $C_a = C_o i$; if $t = 1$, $C_a = \frac{C_o i}{\frac{1+i-1}{1+i}} = C_o(1+i)$.

In between, C_a = combos of C_i and $\frac{C_o}{t}$

See 82, p. 29

✓ At higher $\underline{i}$, use less land/capl., and in addition, yp. capl. turns faster, giving you a fortiori more volume/land

115. At higher $\underline{i}$, are bound to get intensn cap/land, Res. of lower $\underline{t}$, i.e. cap. turns faster. If $\underline{t}$ remained const., wd. be no change in land/cap. propns.? Even then, wd. dump land. Bert suppose were none, then wd. also $-\Delta t$

W. land, depends on assumptions. If one indiv. gets higher $\underline{i}$, l.v. const., he dumps land. If all $\underline{i}$ rise, l.v. fall, no one dumps land; but all do turn cap. faster. Also $-\Delta C_o$. So does C_a rise or fall? Probly rises, bcs. $\underline{i}$ and $\underline{t}$ both work for a rise, vs. C_o working for a fall. And, in aggreg., how can C_o fall? If there are 1 m pellets of capl. in ec., apply less to some sites, leaves others over to apply elsewhere. For ec., C_o is const.; but $\underline{t}$ falls, $\underline{i}$ rises. So doubly Δ cap. input ... static cap. remaining const.

The Δ due to higher $\underline{i}$ may seem spurious, but is genuine, repg. internal cap. growth during pd. of commitment.

Tentative qual rule: when we harden capl., are subbg capl. for labor; & land for capl. To sub. labor for capl., sub. capl. for land. Soften capl. By hi explicit land charges; hi i.r.; no Δ l.v.

116. It may sometimes be good to limit entry of new capl. into "saturated" indies, when mkt. is givg wrong signals.

117. The 'cap. input' has 2 dimensions; simple quantity, & time. (There are, accordingly, two diff. msrgs. for "cap.-intensity": much q.; & durability).

The relationship of q & t has something to do w. turnover? Not exactly. But the relation of annual cap. input & t is related to turnover.

117, (cont.)

a, the annual =nt, lumps an income element & an am-n element as "the" capl. input. That seems right. Time converts static capl. to 590 more each yr., & that is then consumed as an input, fungible w. initial pellet, or quantum.

If mgnl. lands are hi i.g., is apt to be in sense of heavy static improvements, rather than turnover. Bcs hi xpt. costs. Hi turnover opns. shd. be central.

Develop'g a few central sites w. skyscrapers doesn't help much, bcs top floors are still mgnl, overall effect is low turnover bcs top floors are that, & much cap. sunk frozen in bldg.

To max. ~~turns~~ turns per year (tpy), a uniform but moderate decrmt of all downtown seems optimal

We have devd. a principle that subb'g cap. for labor by method (a) harden'g capl., subs land for labor too. Note, can sub. cap. for labor w/o harden'g cap., by method (b), get cap.-intensity by hi quantum, same turnover.

In fact, if hardens cap. keep's C_o const., you reduce periodic input, thus subb'g labor for cap. in procen'g stage, compensat'g perhaps.

There's another sense of cap. input, of that corresponding to value-added on site. ~~It~~ Here, we subtract from gross output, offsite purchases & decline of net worth, to get value-added ... [not quite, bcs net worth includes accretions on-site in past? No, past accretions counted in past as additions to net worth.]

(117., cont.)

Here, cap. input, contributg to net output, is growth of emplaced capl. ≅ V_i.

This concept recognizes no diffs. due to freq. – but thus gets hi range of factor props. varyg w. freq.

(Note labor i.g. on land in fn. of cap. freq.)

W. hi freq. capl., we get hi i.g. from labor input alone, even if count only simple quantum of capl; If count Q × Freq., get extremely hi I.Q., like 999%.

Call one gross i.g., the other net. Correspond to Bunce's primary & 2dry elast. of prodn.

Is easy to get carried away by beauty of clearing, cancelling out central terms, bearing on nets at ends. As in derivg Σ geom. series. But ghosts of murdered terms may return to haunt, if are more vital to processes than nets

To create emplmt, raise i.g.

i.g. $\frac{\text{non-land input}}{\text{output}}$ (recoverable)

Raise net i.g. But path to that is raising gross i.g., hi cap. freq.

Shun turnover tax, which biases pro low freq, low volume bus. gently.

In my fm. policy study, I emphasize hi i.g. lands as Δg output; now, as absorbg & freezing capl. Contradiction. Lag is part of answer. Hi i.g. lands absorb much capl. before results, thus are ~~to~~ hi i.g., low freq. But create niches finally filled by hi freq. cap., then get flood of output from fraction of the land, collapse l.v.

This helps explain the lag in fact.

117, (cont.)
to aRa can find some hi freq. capl. outlets on input. lands, filling niches. Land to Jap. tomatoes growers.

Note inad. of usual treatment of bldgs, re cap. inputs, net & gross. Probly treated as on-site input. Yet mtrls came from offsite. But bldrs added value onsite. Complex.

Value added onsite is net of bldg depreciation, but only part of it, corresponds to offsite mtrls' value. Just deduct a simple initial value from gross output, ... excess is added on site. Annual onsite cap. input is annualized value of total initial input, less simple value of offsite mtrls. (note parallel to treatment of land?)

118. On undersized land, Δl invmt., characteristically you "get all your money back" in very few years. Imputation problem here, tho, which must be solved to know how fast capl. is turning.

Solve that in a gen framework, elsewhere. Now, note when you improve empty or undersized niches, you recover seed quickly; when you create new niches, slowly.

Pvt. enterprise shuns slow payouts, except when bitten by the bug of Δ l.v. So they get shunted to public. Public initiative at some stages is grand. opens bottlenecks. But builds up juggernauts.

Analogy of liquid expanding, gets cold, freezes.

118a. Re idle land, as 1st approxm. suggest it affects cons. just as tho it were earning its full net income. Thus to Δ actual kinetic income does not Δ C. and, altho it isn't a recovery of capl., has same effects on gross invmt.

119. Micro v. macro emphasis once meant Chi. v. Hvd., cons. v. lib., etc. Bcs. Keynes dominated macro. So Chi. opposed p.w., wasteful, on micro grounds; but Hvd. pro, macro grounds.

Now I show on macro grounds, subsnqnt p.w. very bad.

120. In Keynes etc., there is an infinite fund from which ΔI possible w/o limit. I have, rather, gross inv. depend'g on antic. accn. That is uncomfortably close to rejected idea of ΔI as fn. of ΔS. – or antic. ΔS.

But more compelling arguments are possible re recovery & replacement. Begin w. restaurateur, merchant w. inventories, etc. They maintain some reserves, & elastic., but bulk of replacement is fn. of antic. recovery. Funds are a constraint, not infly. available.

There is no avoiding ~~rejecting~~ refuting this doctrine; ~~trend-acc~~ and inventory-turning seems best way. Replacement obviously waits on recovery, or antic. of it. (or both). Keynes' ass. of automatic replacement implicitly recognizes that, too. Next, link replacement & new invmt. If replacement depends on availability of funds from recovery, then new invmt. must depend in part on availability of funds thus serving.

121. I.q. is dynamic. There is no static i.q. $\text{I.q.} \equiv \frac{\text{Non-land inputs per yr.}}{\text{Gross output per yr.}}$

There are many i.q.s, tho, and one conceivable kind could reflect mass of capl. Cd. include annual appreen. of unexhausted capl. as part of output – also as an input! in form of higher depreen. than otherwise. Thus Δq i.q.

122. 2 steps in replacement's creat'g inc. a) Makes funds available; b) Emptied shell of capl. is demolished to make way for new.

ARA

U.N. Tech. Ass. Adm. Taxes & Fiscal Pol. in Underdevd. Countries N.Y., 1954,

p. 47, vs. G.v.t. has misallocated scarce invmt. funds. Meet that argument .... that taxes improvement will sink too much into durable bldgs.

Add

Accn. Princ. (Note irony of J M Clark
derg. principle premised on a period of prodn., his father's
Harrod's "Relation". beta noire.)

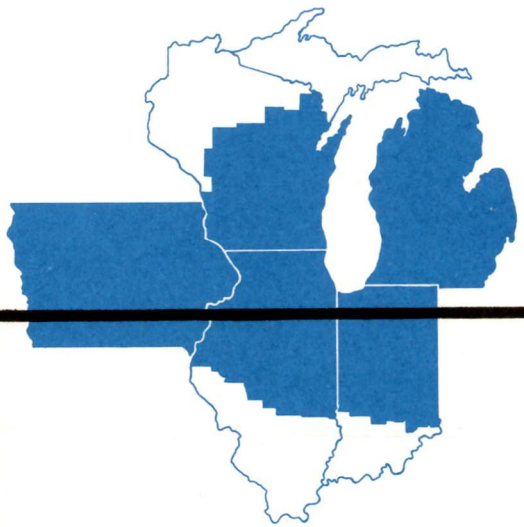
"Accn. principle" bears on gen. of replacement.

The more durable the capl., the greater the accn. mult., the more instability.

Beware my feeling to note that one of my principles is accn. in disguise.

A review by the **Federal Reserve Bank of Chicago**

Business Conditions



1962 August

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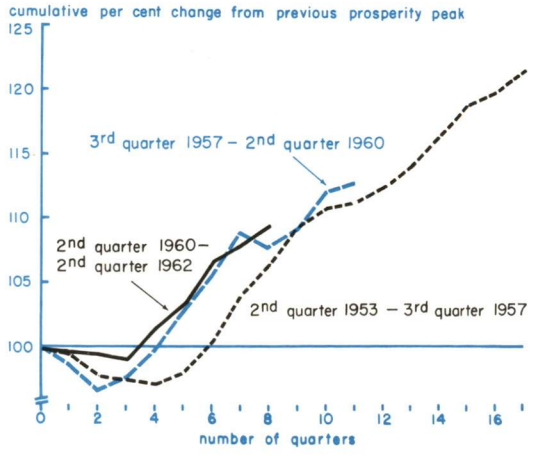
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THE Trend OF BUSINESS

Employment, personal income and industrial production leveled off in June while retail sales declined from the advanced rate of the spring. Only construction, among the broad measures of activity, continued to rise as the first half of 1962 drew to a close. These national trends were in evidence in most large industrial areas of the Midwest.

The current business expansion which began early in 1961 has been marked by two interruptions—in September and again in January—but in each case the upswing resumed after a brief pause. It remains to be seen whether the slowdown evident at mid-year will be of longer duration, or even give way to a general business decline.

Rise in spending on goods and services since pre-recession peak compares favorably with previous upswings



During the postwar period, upswings in activity have averaged about three years in length. Within these movements there have been frequent periods when the major indicators of activity leveled or declined without a reversal of the basic upward movement. Pauses which occurred in 1947, 1951 and 1956, for example, were followed by one to two years of further business improvement. The recent leveling of activity has been closely related to the reduced rate of build-up of business inventories between the first and second quarters of the year as steel users cut back stocks of that metal. However, if demand for goods and services is maintained, business inventories over-all probably would not be reduced.

Inventory building slows

The entire decline in purchases of goods and services in the 1960-61 recession has been attributed to a shift in business inventories, according to recently revised estimates published by the Department of Commerce. The annual rate of total spending in the first quarter of 1962 is now estimated at 545 billion dollars, while the spending rate advanced to 552 billion in the second quarter. This was well below the 565 billion commonly projected at the beginning of the year.

Both before and after the 1959 steel strike, business inventories rose at an annual rate of

more than 10 billion dollars. At the start of 1962 many observers believed that accumulation might reach these proportions prior to the expiration of the existing steel industry labor contract at the end of June. The rate of inventory accumulation did rise during 1961 and reached a rate of almost 7 billion dollars in the first quarter of 1962. However, there was a drop to about 3.5 billion in the second quarter. With this change in inventories taken into account, it appears that purchases of goods and services "for use rather than resale" rose 10.2 billion dollars in the second quarter, compared with 5.7 billion in the first.

The cutback in steel inventories in recent months has been accompanied by a marked slackening in the rate of build-up in some other lines. During the spring quarter most other durable and nondurable goods producers and many trade firms slowed their additions to inventory or actually reduced stocks which were believed to be excessive. In March, 50 per cent of the purchasing agents of Chicago, representing a variety of firms, reported higher inventories compared with the previous month while only 5 per cent reported lower inventories. In June, 23 per cent reported higher inventories while 22 per cent reported reductions.

Business managers always attempt to keep inventories at minimum levels consistent with profitable operations. However, they are willing to increase stocks when "lead-times" (the period of advance notice required by suppliers to assure delivery) are lengthening or expected to lengthen and when prices are rising or expected to rise.

Early in 1962 there was some tendency for lead-times to stretch out—a normal development in a business expansion. But this proved to be temporary and was reversed in the spring as it became apparent that manufacturing firms had ample capacity to maintain delivery schedules in the face of rising demand. Average wholesale prices, meanwhile, remained stable with many individual prices actually being reduced, contrary to earlier expectations. In mid-July, *Purchasing Week's* index of prices of 17 industrial raw materials was 5 per cent lower than in January.

Contrasts: construction and durables

The most vigorous sector of the economy continues to be construction. The value of new construction put in place reached a seasonally adjusted annual rate of 63 billion dollars in June, 11 per cent above the same month of 1961 which had been a near record. Further increases may be in store judging by the strength in new construction contracts. For the first five months of the year construction contracts, nationally, were 17 per cent above the same period of 1961. In the Midwest, contracts through May were only 4 per cent above last year.

In contrast to the favorable trend in construction is the sluggishness in new orders reported by durable goods manufacturers across the nation. New orders for durables declined steadily from a rate of 16.4 billion dollars in January to 15.3 billion in June. Through April, however, this decline was entirely attributable to a sharp drop in steel orders. In May and June steel orders rose, but orders for all other types of durable goods declined and were below shipments.

At the end of June unfilled orders of durable goods manufacturers amounted to 44.1 billion dollars, down 2.2 billion from February—the high for the year. This order backlog represented only 2.8 months' shipments, slightly less than a year ago and well below the level of earlier years.

Retail trade declines

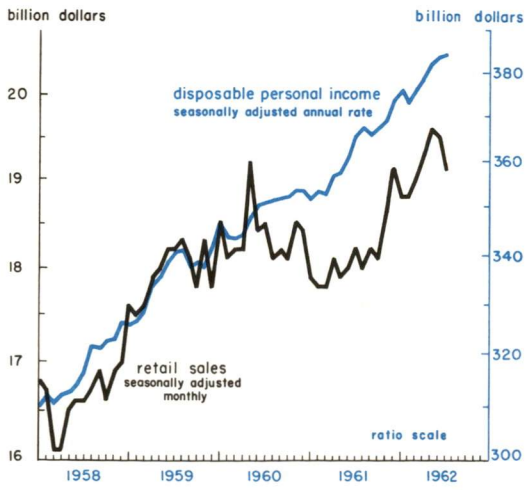
There was a distinct slowing in consumer

buying in June which extended to most retail lines. Perhaps this was in part a reaction to the very high level of retail purchases in April and May. Reports for early July pointed to a reversal of the downtrend.

Total auto deliveries to American customers, including imports, declined to a seasonally adjusted annual rate of about 6.9 million units in June from an average of about 7.2 in the previous two months. June department store sales declined by more than 3 per cent from the April-May average, both in the nation and in the Seventh District.

Despite the June decline, retail sales in the second quarter as a whole, at an annual rate of 233 billion dollars, were 2 per cent higher than in the first quarter and 8 per cent above the level of a year earlier. These increases were somewhat greater than the corresponding gains in personal income.

Retail sales declined in May and June while rise in income continued at a slower pace



Most categories of retail sales were substantially higher in the second quarter than in the comparable period of 1961. Nondurables were up 6 per cent and durables, led by automobiles, 12 per cent. For each of these groups second quarter sales were at a record high.

Farm prospects

As a result of favorable weather conditions throughout most of the nation, it appears that crop production during 1962 will be a near record and farm income will equal or slightly exceed the improved level of 1961. Prospects are especially promising in the Corn Belt states where moisture and temperature conditions through mid-July have been described as "unbelievably good."

High crop production is being achieved despite the fact that farmers have idled almost 50 million acres this year under the Government's feed grain and wheat programs. As a result, acreage planted in all crops totals less than 300 million acres—the smallest in many years.

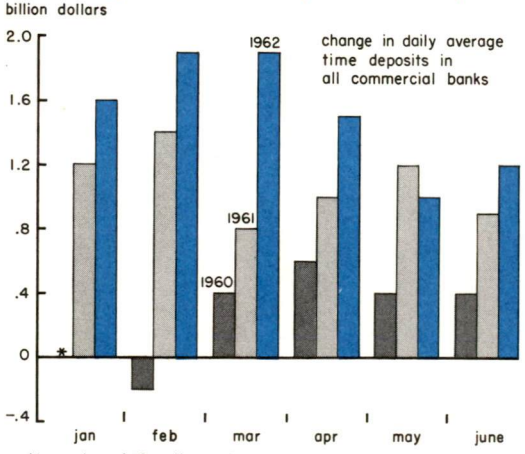
During the past two years hog prices have been high relative to corn prices. In the earlier postwar period hog-corn price ratios comparable to those currently prevailing have been followed by rapid increases in hog production and, in turn, by declines in hog prices. But hog production has increased very slowly the past two years and, indeed, the 1962 spring pig crop was slightly lower than that of a year earlier. In part, this reflects uncertainties surrounding operation of the Government's feed grain program. With reduced supplies, hog prices in recent weeks have been somewhat higher than a year ago. Because the fall pig crop is expected to be no more than 1 per cent above that of 1961, market prices for hogs are likely to remain relatively strong well into next year.

Trends IN BANKING AND FINANCE

Growth of commercial bank time deposits in June was greater than in May although below the very large increases in the first four months of the year. Moreover, reports from Midwest banks indicate that in the latest two months corporate accounts have declined and individual accounts have risen in relative importance as sources of the increase in time deposits.

Time deposits have been rising rapidly since about mid-1960. During the first six months of 1962 the increase at all commercial banks in the United States was 9.1 billion dollars. This compares with 6.5 billion in the corresponding period of 1961 and 1.6 billion in the first half of 1960. The exceptionally large growth in the first half of last year, compared with 1960, reflected—in addition to a high rate of saving by individuals—the issuance of special noninterest bearing time certificates of deposit to a large retail firm as a part of a credit transaction and the development of a market for negotiable time certificates of deposit issued by large banks. The further rise in the current year reflects mainly the effects of higher interest rates paid by most banks for time deposits.

Time deposit growth rose in June following declines in April and May



*Less than $50 million change.

A significant aspect of the growth in time deposits during the first half of 1962 has been the rising proportion attributable to accounts other than personal savings-type deposits. While savings accounts comprise the bulk of commercial bank time deposits (almost 80 per cent at member banks), much of the fluctuation in the rate of growth has been due to variations in other types of time deposits, particularly those held by corporations.

Because the corporate accounts are mainly concentrated in large banks in major cities, time deposits at these banks have generally risen faster than at banks in smaller centers and in rural areas. For example, the large member banks in the five major cities of the Seventh Federal Reserve District reporting such information weekly had an 18 per cent increase in time deposits during the first six months of 1962, while at banks outside these major cities the increase was half as much.

Although corporate deposits constitute only about one-eighth of the time deposits of these banks, they accounted for almost half of the increase in total time deposits in April. During May and June, however, corporations accounted for a smaller portion of the increase. The volume of negotiable time cer-

tificates of deposit issued primarily by large banks and mainly to corporations had risen rapidly from January to about mid-April. By mid-June this expansion ceased and outstandings remained quite stable despite somewhat higher rates offered on these instruments in recent weeks.

Meanwhile, personal savings-type deposits at the reporting banks rose rapidly in May and June. Besides corporate and personal accounts, time deposits include special purpose open accounts and deposits held by state and local governments. These have not shown any consistent pattern of change in recent months.

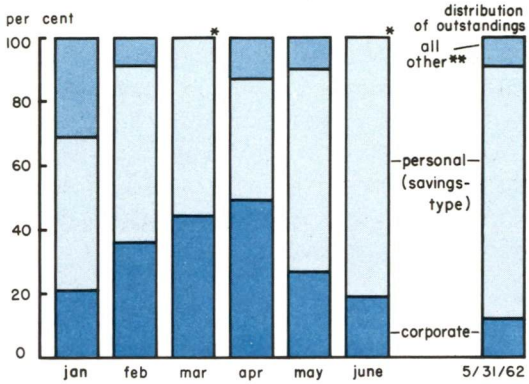
Interest rates higher

Yields in all sectors of the money and capital markets moved up through mid-July from the reduced levels reached in late spring. The three-month Treasury bill rate showed the greatest rise, increasing from about 2¾ to about 3 per cent during this period. The increase in short-term rates was largely attributable to continued efforts by the Treasury and Federal Reserve to keep these rates competitive with those on similar investments available abroad. Of particular importance was the Treasury's program of raising funds by adding 200 million dollars weekly to the regular bill auctions. In addition, the short-term market may have been influenced by recent actions of the Canadian Government to bolster the Canadian dollar, including an increase in the central bank discount rate to 6 per cent and sharp upward adjustments in money market rates. These measures apparently gave rise to expectations that rates here would move up in response to a return flow of funds to Canada from the United States market as confidence in the Canadian dollar was restored.

Increased yields on intermediate- and long-term Government securities were, in part, related to developments in the short area but also reflected uncertainties as to the outlook for monetary policy and the amount and nature of the Treasury's forthcoming financing operations. By mid-July the average yield on long-term bonds exceeded 4 per cent for the first time since early March.

Corporate share of time deposit growth fell in recent months

Distribution of increase in time deposits of weekly reporting banks in five major cities in the Seventh District



*"All other" deposits declined slightly.

**Includes deposits of states and municipalities and non-corporate open accounts.

Available evidence shows very little change in the cost of short-term bank loans to businesses in the Midwest. Interest rates on business loans maturing within one year, made during the first half of June by large banks in the District, were only slightly higher than in March (4.91 per cent compared with 4.88 per cent). Although the number of loans made by the reporting banks in this period was somewhat larger than a year ago, the total dollar volume—mainly due to the decline in very large loans—was about 6 per cent less.

Margin requirements cut

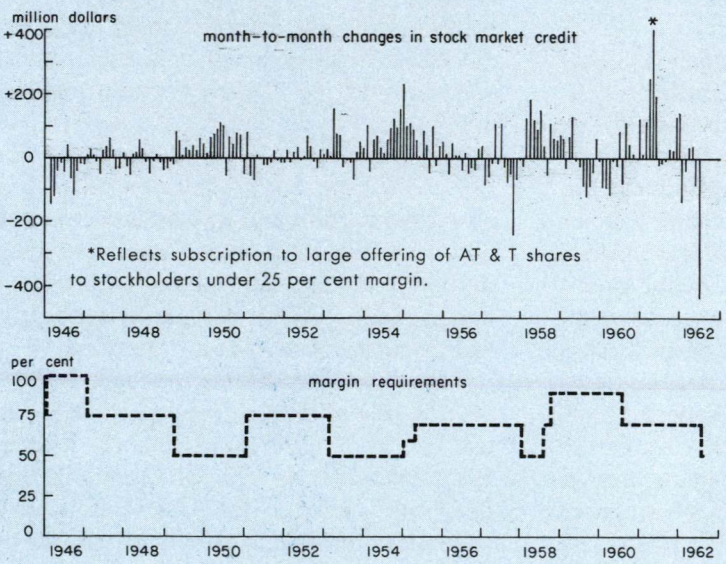
Effective July 10, the Board of Governors of the Federal Reserve System reduced mar-

gin requirements for stock market credit extended by brokers and banks (under Regulations T and U) from 70 to 50 per cent of the value of the securities. This means that the purchaser of a listed stock can now borrow up to 50 per cent of the purchase price instead of the previous maximum of 30 per cent.

Since the Board was first given authority to regulate stock market credit under the Securities and Exchange Act of 1934, margin requirements have varied from 25 to 100 per cent, with the latter in effect for about a year —from January 1946 to January 1947. Changes during the postwar period are shown in the accompanying chart.

The regulation of stock market credit is "for the purpose of preventing excessive use of credit for the purchase or carrying of securities," not to affect stock prices. Most changes in margin requirements in recent years have followed trends in the amount of stock market credit extended. Margin requirements have been raised when credit—as measured by customers' debit balances with stock exchange firms and loans from banks—showed a tendency to rise sharply and have been adjusted downward when the volume of credit declined. The most recent change followed a substantial reduction in the amount of stock market credit (as sellers of stocks paid off loans) in May and June and was consistent with the abatement of the speculative psychology that had characterized the earlier period of rising stock prices.

Changes in margin requirements have often followed large increases or decreases in stock market credit



Regulations T and U limit the amount of credit that can be extended by brokers and dealers on listed securities (those registered on a national securities exchange) and by banks on stocks used as collateral for loans for the purpose of purchasing or carrying listed securities. These regulations prescribe the maximum loan value as a percentage of the market value at the time of purchase. The margin requirement represents the buyer's equity as a proportion of the purchase price of the stock. Requirements are uniform for brokers and banks and apply equally to purchases and short sales.

Economic growth and the Federal area redevelopment program

In 1957-58 an estimated 14,000 separate area development programs were in existence in the United States. These programs, involving public as well as private funds and talents, ranged all the way from advertising the advantages of industrial location in particular communities to the provision of low-cost credit, cash assistance and tax concessions for new plant investments.

The number of such programs has doubtless increased in recent years as many localities have felt the effects of the closing or removal of key industrial plants, shifts in military procurement and falling employment in the mining and railroad industries. Other sections have been adversely affected by the decline of farm population and reduced employment resulting from the installation of labor-saving machinery in local plants. While such changes are a normal ingredient of economic progress, they may have affected relatively more areas recently than in earlier years and there is, in any event, a greater tendency to respond with a specific program of direct action.

Local economic development programs, therefore, have focused increasingly upon measures to boost employment in labor surplus areas. In 1961 the U. S. Government became an active partner in this effort.

Emphasis on industrial growth

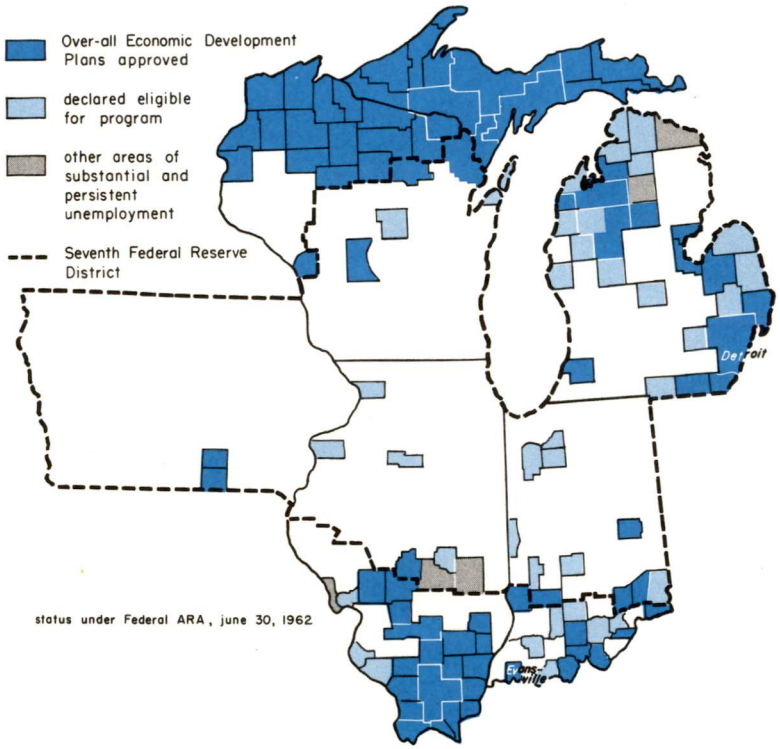
Industrial activity, particularly manufacturing, gains top billing in most area development programs. Establishment of a new factory in the community, or expansion of an existing one, tends to increase local income as the "export" of goods into a regional or national market is matched by a return flow of money.

A big portion of the addition to income will, of course, pour out again—in the form of payments to outside suppliers, interest and dividends to nonresident investors and tax remittances to the Federal and state governments. But some of the added income—indeed, a major share of it in the "typical" instance—will be disbursed within the community, mainly as wages, payments to local suppliers of materials and services, and taxes for school, city, county and other local governmental purposes. A new plant facility thus means jobs for some who otherwise would be unemployed—and quite possibly a burden on welfare budgets—besides additional income to bolster the local economy in general.

The stimulation of local economic development is viewed with suspicion in some quarters as a "beggar-my-neighbor" practice. What one area may gain, it is contended, another must forego. This will, of course, be true unless promotional activity on balance gives rise to a greater over-all rate of industrial expansion than would otherwise occur.

It is sometimes argued further that promotional efforts may take a toll in productive efficiency. Communities and regions offering inducements, it is pointed out, may not be places where industrial development "ought" to take place, giving due weight to such other factors as proximity to suppliers and markets and the availability of utility and community services, transportation and banking facilities

Area redevelopment activities under way in five midwestern states



and an adequate supply of skilled labor.

Business firms seeking locations for new plant facilities generally favor localities where labor is readily available: other things the same, a labor-surplus community has more appeal than one with little available manpower. In a sense, development efforts amount to acquainting the business community with the existence of areas where labor of requisite training and experience is in excess supply and in some cases offering incentives to investment within them. The financial inducement, in turn, may be viewed as a substitute for the lower and therefore tempting wage level that the presence of unemployment indicates would prevail in the absence of wage floors established by law, collective bargaining or other influences.

The savings in welfare costs, increases in property values, expansion of business sales and, in general, the advance in local income associated with economic growth constitute a potential source of financial support for development efforts. Thus, local merchants sometimes band together to raise funds to finance construction of industrial buildings for lease (or donation) to occupants agreeing to provide specified numbers of jobs. The prospect of direct earnings on the capital raised is secondary. The "return" instead is the boost to retail sales produced by the new jobs and income and, perhaps in addition, property tax savings accompanying a cut in relief rolls.

Similarly, the community as a whole may try to promote development by offering cash grants from local tax funds or assisting in a less direct fashion by using its credit as a municipal borrower to raise the needed capital. Full or partial waiver of property tax liability on plants conventionally financed is another form of financial inducement and often a fairly "inexpensive" one. The presence of the new industrial facility is unlikely to

affect the expenditure side of the local budget to the same extent that it will the revenue side if subject to taxation at the full rate. Development aid becomes a matter of foregoing part of the margin between the tax revenue that the plant otherwise would provide and the governmental costs occasioned by its presence in return for a variety of spillover benefits.

Effects not always localized

Problems posed by local unemployment frequently spread to a wider area than the local community directly involved. Drains on state unemployment insurance reserves, assistance and other welfare funds, as well as the loss of taxpaying capacity on the part of the unemployed, mean that the labor surplus areas to some degree affect the entire state. Reflecting this, the statutes of substantially all the states now authorize the formation of private industrial development corporations designed to help finance business investment. Moreover, 15 states have set up statewide development corporations or authorities financed by tax appropriations or borrowings. These agencies characteristically provide low-cost credit to local development corporations which, in turn, make financial aid available to business firms. None of these agencies are in operation in the Seventh Federal Reserve District states; Illinois passed legislation establishing an industrial development authority in 1961, but the state Supreme Court ruled it unconstitutional earlier this year.

Pressure for direct state action to aid distressed areas appears to reflect in part limitations on the taxing and borrowing powers of local governments and legal barriers to tax exemption for any but a few purposes.

A state government's ability to aid area economic development frequently is limited by the same kinds of legal obstacles as those confronting the local governments. Moreover, the budgetary pressures from other quarters—such as school aid, assistance to the needy, higher education and public hospitals—has severely limited the states' capacity to assume new financial responsibilities, notwithstanding prospects of longer-term benefits. Particularly hard hit are states where the unemployment problem has been especially serious.

In Michigan, for example, 65 per cent of the total population is located in areas where unemployment conditions for many months have been "substantial and persistent." The proportion of total population in "labor surplus" areas in the other Seventh District states is lower: Indiana, 17 per cent; Wisconsin, 11; Illinois, 8; and Iowa, less than 1 per cent. For West Virginia, on the other hand, the ratio is 96 per cent, while for both Kentucky and Pennsylvania, it is more than 50 per cent. Nationally, labor surplus communities account for nearly one-fifth of the population.

Substantial and persistent labor surplus is, of course, a matter of somewhat arbitrary definition. In the past several years it has become common practice to regard unemployment in a given labor market as "substantial" if the proportion of the labor force currently out of work and seeking employment is at least 6 per cent. The unemployment problem is said to be "persistent" if the local rate was twice as high as the United States average in one of the preceding two years, 75 per cent higher for two of the preceding three, or 50 per cent higher in three of the prior four years.

These criteria have taken on added significance with the adoption of the Federal Area Redevelopment Act (ARA) in early 1961. The new program is specifically designed to assist communities in the substantial and persistent labor surplus category—along with certain Indian reservations and farming counties where low income may be a better indicator of labor surplus than unemployment.

Assistance for labor-surplus areas

The legislation establishing the area redevelopment program authorizes a maximum of 200 million dollars in industrial and commercial loans to be evenly divided between urban and rural labor surplus areas and 100 million dollars in loans to municipalities. Grants for municipal projects are limited to a total of 75 million dollars. To help pay for local research and development activities, 4.5 million dollars is available yearly. The manpower retraining aspect of the program is supported by an expenditure authorization of 14.5 million dollars a year—4.5 million for instruction and 10 million for subsistence payments to trainees.

Aid in the form of **loans for industrial (or commercial) purposes** is available to finance up to 65 per cent of the cost of approved business undertakings. Credit is provided when it is not readily obtainable from conventional sources on "reasonable" terms. At least 10 per cent of the project cost must be supplied by some responsible state or local agency or nongovernmental development organization. The project must be expected to contribute to a lasting improvement in the local employment situation. The credit may be used to finance the purchase or development of land and structures and, where the need is demonstrated, the cost of equipment. These funds are not to supply working capital, nor may they be used to pay for relocation of existing firms. Loan maturities are limited to 25 years and the interest charged has been 4 per cent.

Federal area redevelopment **credit for municipal public works** is available for projects directly linked to industrial development. Examples are water and sewer line extensions to serve new plants or additions to pumping capacity installed in order to accommodate industrial users. Again, there is the requirement that ARA assistance be confined to instances where funds are not otherwise available at a "reasonable" cost. Loan maturities may be as long as 40 years and the interest rate charged to date has been 3⅜ per cent. **Cash grants for municipal use** may be made where the proposed project clearly will serve a pressing need, would not otherwise be financially feasible and the recipient municipality participates in the financing to the extent of its ability.

Federal funds for local growth

The area redevelopment program offers several kinds of assistance. One is credit for industrial or commercial development. Another is financial assistance—both credit and cash grants—for municipal public improvements. Technical guidance also is available for local development planning and the program includes a small-scale manpower retraining effort now largely superseded by the Manpower Development and Training Act adopted earlier this year.

Before aid can be extended to an "eligible" area, a suitable over-all economic development plan (OEDP) must be approved by a responsible agency of the state government and by the U. S. Department of Commerce. At midyear such plans had been finally approved for some 520 labor surplus areas. These covered 571 individual counties, plus 21 Indian reservations. Population of the areas thus approved for ARA aid totaled nearly 24 million: 17 million in 201 urban counties and the remainder in 370 rural communities. The largest labor markets receiving

ARA approval on their proposed development plans were Detroit and Pittsburgh.

By the end of June OEDP's had been approved for 12 urban and 19 rural counties in Michigan with a total population of 4.6 million. In Illinois, 23 southern counties having about a half million residents had secured approval for their plans. Twelve Indiana counties (433,000 inhabitants), 20 Wisconsin counties (370,000)—mostly in the northern part of the state—and two small Iowa rural counties (only 26,000) were also covered by approved plans.

Through the end of June, 5.5 million dollars in ARA funds had been released to specific projects in Seventh District states. Four industrial loans had been made, totaling 1.4 million dollars: one in Upper Michigan, one in southern Indiana and two in southern Illinois. Some 2.5 million dollars in public facilities aid had been provided—half as credits and half in the form of grants—for projects in Upper Michigan, southern Indiana and southern Illinois. A total of 290 thousand dollars also had been made available under six technical assistance or planning grants. Another 1.25 million dollars had been approved for manpower retraining—700 thousand in Michigan, 300 thousand in Illinois and 250 thousand in Indiana.

By midyear the ARA had approved individual projects throughout the nation calling for the disbursement of roughly 50 million dollars. Although this represented only one-third of the total ARA funds available for the fiscal year ended June 30, there were indications that projects moving through administrative "pipelines" were likely to utilize fully the programs' financial resources.

Efforts have been made to make the ARA a coordinating agency for the numerous Federal services and activities that focus on economic development. One example of this relates to the activities of the Small Business Administration. Loans made by the SBA to firms in labor surplus communities carry an interest charge of only 4 per cent, whereas the rate on all other SBA loans is 5½ per cent. In the 12-month period ended March 31, 1962, SBA 4 per cent loans totaled almost 160 million dollars, or approximately 40 per cent of all loans made by the agency during this period. Almost 21 million dollars of these 4 per cent loans went to firms in the Seventh District—13 million to Michigan alone.

Moreover, SBA field personnel have assisted in processing applications for ARA assistance. The community facilities administration in the Housing and Home Finance Agency similarly screens applications for ARA aid for local public works.

ARA not a cure-all

An examination of some 40 individual industrial loans made under ARA during the past year indicates that about 5,000 new jobs were created by an investment of slightly less than 18 million dollars in land and structures. More than half of this investment was financed under ARA, the remainder—plus the additional funds required for machinery and equipment and working capital—came from local sources and from SBA. The investment in land and structures, thus, works out to about $3,600 per job "created."

With total unemployment in the United States currently in excess of 4 million, it is obvious that the 450 million dollar ARA program cannot be expected to supply jobs for all the unemployed. There are, however, good reasons for judging that it may be of significant help to some especially distressed communities that might otherwise remain troublesome even in the face of a substantial pickup in national output and the total demand for labor.

New light on United States exports

In 1961 both the trade surplus and the balance of payments position of the United States improved substantially from the previous year. The trade surplus—the excess of merchandise exports over merchandise imports—rose by roughly 700 million dollars to 5.4 billion while the deficit in the over-all balance of international payments declined by about 1.4 billion to 2.5 billion dollars.

The improvement in the trade surplus stemmed primarily from an increase in exports and, to a lesser extent, a drop in imports. Exports rose from 19.5 billion dollars in 1960 to 19.9 billion dollars in 1961. This increase, however, made only a modest contribution to the reduction in the over-all balance of payments deficit since more than four-fifths of the gain was directly financed by Government loans and grants under the various foreign economic assistance programs. Such exports rose by almost 400 million dollars to 2.2 billion in 1961, while those financed through commercial channels increased by less than 100 million to about 17.7 billion dollars.[1]

In contrast to most privately financed exports, those financed under Government assistance programs have no direct impact on the deficit or surplus in our balance of international payments since they do not involve transfer of dollars or convertible currencies from abroad to the accounts of American citizens during the current balance of payments accounting period.

However, exports financed by Government loans which are repayable in dollars, such as those extended by the Export-Import Bank, will ultimately result in a return flow of dollars from abroad as the loans are repaid. But there is a substantial time lag. For example, Export-Import Bank exporter credits, which are used exclusively to finance United States exports, carry maturities ranging up to a maximum of seven years while Agency for International Development loans can be for a maximum of 40 years. Moreover, AID loans customarily contain a lengthy grace period during which no repayments are required.

The majority of privately financed merchandise exports, on the other hand, have a favorable impact on the United States balance of international payments in that they involve payment by foreigners in dollars or other convertible currencies during the same accounting period. A small and hard to estimate portion of such exports, however, do not result in immediate "money payments" from abroad. These include primarily goods sold on longer-term credit or linked to the outflow of private long-term capital incident to the overseas expansion of American business firms.

In the table below, merchandise exports financed by Government loans and grants have been subtracted from the trade balance for 1960 and 1961. This indicates that the

[1]Data on Government-financed exports are compiled by the U. S. Department of Commerce. They include exports under the "Food for Peace" program, the Agency for International Development, the Export-Import Bank and other smaller programs. Although the data on Government-financed exports are incomplete in some respects and are not available for years prior to 1960, they contribute to a clearer understanding of the impact of these programs on the balance of international payments.

What is a balance of international payments?

A balance of international payments is a record of a nation's total economic transactions with the rest of the world during a given period of time. It is not a balance sheet since it does not show a nation's total assets abroad or its total liabilities to foreigners, but rather provides a summary of its total *receipts from* foreign individuals, corporations, governments and international organizations, and its *payments to* them. It includes transactions related to the supplying of goods and services, the lending and investing of short- and long-term funds and the granting of aid.

Total receipts always equal total payments during any given accounting period. Deficits and surpluses are measured by changes in selected receipts and payments categories. With respect to the United States, it is customary to refer to net sales (or purchases) of gold and convertible currencies by the U. S. Treasury and the Federal Reserve System, plus the net increase (or decrease) in our liquid dollar liabilities to foreigners as the over-all "deficit" (or "surplus") in the balance of payments.

In every year since 1958 the United States has incurred a sizable over-all deficit in its balance of international payments. The cumulative deficit for the four-year period totaled 13.6 billion dollars. About 5.5 billion, or two-fifths, of this deficit was covered by sales of gold to foreigners, and the remainder by a rise in foreign deposits in domestic banks, holdings of U. S. Treasury securities and other liquid dollar assets.

The major components in the United States balance of payments are summarized in the accompanying table.

United States balance of international payments

	1958	1959	1960	1961	Total 1958-1961
	billion dollars; payments (—)				
Nonmilitary trade and services:					
Merchandise exports	16.3	16.3	19.5	19.9	72.0
Service exports	6.8	7.2	7.2	7.8	29.0
	23.1	23.5	26.7	27.7	101.0
Merchandise imports	—13.0	—15.3	—14.7	—14.5	—57.5
Service imports	—4.7	—5.1	—5.4	—5.5	—20.7
	—17.7	—20.3	—20.1	—20.0	—78.2
Balance on trade and services	**5.4**	**3.1**	**6.6**	**7.7**	**22.8**
Other major transactions:					
Military expenditures abroad (net)	—3.1	—2.8	—2.7	—2.5	—11.1
Government grants and loans (net)	—2.6	—2.0	—2.8	—2.8	—10.2
U. S. private capital:					
Long-term loans and investments	—2.5	—2.3	—2.5	—2.5	—9.8
Short-term loans and investments	—0.4	—0.1	—1.3	—1.5	—3.3
Foreign long-term loans and investments in the U. S.	—	0.7	0.2	0.6	1.5
Remittances and pensions	—0.7	—0.8	—0.8	—0.9	—3.2
Balance	**—9.3**	**—7.3**	**—10.0**	**—9.6**	**—36.1**
Unrecorded transactions:	**0.4**	**0.5**	**—0.6**	**—0.6**	**—0.3**
Over-all balance: deficit (—)	**—3.5**	**—3.7**	**—3.9**	**—2.5**	**—13.6**
Balancing items:					
Decrease in official holdings of gold and convertible foreign currency	2.3	0.7	1.7	0.8	5.5
Increase in foreign liquid dollar claims on U. S.	1.2	3.0	2.2	1.7	8.1
	3.5	**3.7**	**3.9**	**2.5**	**13.6**

Note: Totals may not balance due to rounding.

SOURCE: U. S. Department of Commerce.

improvement in the trade surplus, excluding Government-financed exports, between 1960 and 1961 is attributable almost exclusively to a decline in imports rather than to a rise in exports.

United States exports and imports

(military items excluded)

	1960	1961
	(billion dollars)	
Merchandise exports	19,459	19,915
Less: Government-financed exports	1,798	2,183
Privately financed exports	17,661	17,732
Less: Merchandise imports	14,723	14,514
Trade surplus excluding government-financed exports	2,938	3,218
Trade surplus including government-financed exports	4,736	5,401

SOURCE: U. S. Department of Commerce.

Farm products account for more than half the exports under Government assistance programs

	1960	1961
	(million dollars)	
"Food for Peace"	1,196	1,239
Agency for International Development	390	499
Export–Import Bank	364	621
Other programs	4	4
Total	**1,798**	**2,183**

Note: Utilization of foreign currencies acquired under these programs, mainly for Government purchases abroad, have been deducted from the totals to obtain the Government-financed export figures shown in the balance of payments statement. In 1960 such expenditures amounted to 156 million dollars and in 1961, 180 million.

SOURCE: U. S. Department of Commerce.

Government-financed exports up

Merchandise exports financed by Government loans and grants have risen much faster than privately financed exports since the early part of 1960. Part of the increase in Government-financed exports is attributable to a tightening of procurement procedures, initiated as far back as the fall of 1959, to assure that a larger percentage of foreign aid funds would be spent directly in the United States. An increase in Export-Import Bank exporter credits associated with the financing of large foreign purchases of American commercial jet aircraft was a further contributing factor. Another important factor has been the continued expansion of "Food for Peace" exports under Public Law 480 and other "special" Government programs for disposing of surplus farm commodities.

Although Government-financed exports have no direct impact on the United States balance of payments, they undoubtedly have some indirect effects, but these are difficult to measure. They depend largely on whether the foreign country would have obtained the goods elsewhere if Government financing had not been available. Moreover, these exports help to alleviate pressures on the balance of payments of the recipient countries and tend to strengthen their currencies relative to the dollar.

Trade outlook encouraging

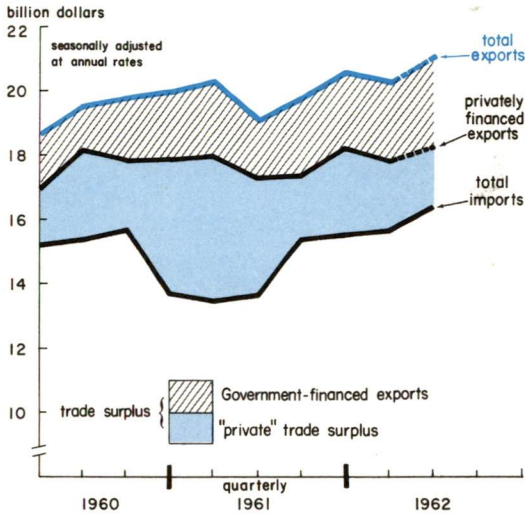
Eliminating the deficit in the United States balance of payments will require either cutting back our expenditures and investments abroad, increasing our overseas dollar earn-

ings or attracting additional foreign investment to this country. Efforts are being made, with some success, to reduce the dollar outflow connected with our overseas military programs and to persuade foreign industrial countries to boost their economic aid to underdeveloped areas. However, the major effect may be to restrain further increases in dollar expenditures abroad rather than to reduce them below present levels. At the same time imports of industrial raw materials and tropical foodstuffs to this country will probably rise with the growth of the domestic economy. Major attention, therefore, has focused on policies for boosting exports which have a favorable impact on our balance of payments.

In 1961 privately financed exports amounted to 17.7 billion dollars—an increase of less than 100 million from the previous year. Although such exports were at a seasonally adjusted annual rate of 17.8 billion dollars in the first quarter of 1962, this represents a decrease of nearly 200 million from the year-ago period and nearly 400 million since the fourth quarter. During May and June these exports probably rose again to the relatively high fourth quarter level.

Merchandise imports, on the other hand, have risen from an annual rate of 13.5 billion

Decline in "private" trade surplus during past year reflects sharp rise in imports



SOURCE: U. S. Department of Commerce.

dollars in the first quarter of 1961 to 15.7 billion in the first quarter of 1962 as domestic business activity increased. The succeeding three months have seen a further increase to a rate of 16.4 billion. This country's "private" trade surplus, therefore, declined sharply from the first quarter of 1961 to the first quarter of this year.

But the scene may be changing. During the last two years prices and wages in other major industrial countries have increased at a substantially faster pace than in this country. If these trends continue, the demand for privately financed American exports should strengthen materially. Moreover, the modest increase in imports to 3.0 per cent of gross national product in the first quarter of this year in contrast to 3.2 per cent in 1959 may be a further indication of basic improvement in the United States trade position.

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U of L publicity See Dean Shea again

Play up urban univ. doing urban research. New Dept. of Urban affairs
New appreciation of the city as something of potential good, not just a cesspool.

City, City.. & State of hi standards of assessment.

Ford Grant, urban studies ... (implicate Petshek so as to lure him into more research money?)

UofL emerging as important new center for urban research. (Go over prospectus D.U.A. program.) Class. Very much emphasis new, lack of binding tradition, try new courses, ideas, etc.

Urban Peace Corps training here, one of first in country, encourage urban home ownership in Peru

I teach Urban Land Ecs. in Dept. of Ecs. Surely, different approach from Madison trad.: where is in Commerce. Emphasis land ecs. as part of main body of ec. theory, reintegrate, reestablish lines of communication. Also, more emphasis on public viewpt., train pub. servants like tax assessors, planners ..

Posture for writing on macro. Surely sympathetic, but one-upmanship of adding practical realism, & bodies of theory hitherto overlooked.

ARA.

My theory needs graphic e.g.s of how commod. capl. flows from lending to borrowing region, leaving shortage of circ'g capl. in lending region.

[Blood & coagulation, or "somatification"; better than freezing analogy, & preserves organism analogy.]

During xfr, a transition, cap. expert employs labor. But when expert completed, leaves unemployed labor, also land, requiring return flow.

See s 474 on shown tumours
of big corpus. uteri.

ROBERT P. THOMPSON

DEALER REPRESENTATIVE - SALES
MILWAUKEE GAS LIGHT COMPANY

BROADWAY 6-6720
EXT. 528

Hyperinflm — also causes hardening of capl.

Bcs. ~~resists~~ flight from M means into hard goods.

In fire insurance cases, do they pay full amount of policy, or just demonstrated damages?

If latter, see if they don't deduct ~~amt~~ worth of land.

I'll bet they don't, though, bcs. they go on replacement theory, ... replacement w/o depreen. Probly bcs. that helps sell more insurance.

Talk to whoever in Commerce teaches Insurance.

ARA

Current problem, '62

GNP ~~sitting~~ const. from '61.

But that cd. mask ANI, bcs as cap. becomes more durable, depreen. falls.

Other hand, in n.i. accts., turnover not counted as depreen, so maybe accty. depreen. rises as more cap. is sunk in bldgs.

eRa

Analogy of frozen radiator.

Ice block causes overheating by blocking circulation.

to frozen capl. - - -

spell it out.

ARA

Another limit of t.f. l ara:

bare studies. More t.f. means more

een bare.

aRa

Mult. depends on genus of hom-type.

W. real anal., is no mult.

To solve for m.e.c. when costs & revs. not concd. at end points:

$$mec = \left[\frac{\sum R_n(1+i)^{m-n} + O_m}{\sum C_n(1+i)^{-n} + O_o}\right]^{\frac{1}{m}} - 1$$

Of course, you must assume an i. But if m.e.c. is higher than i, raise i & try again, etc. By trial & error, get pretty close pretty fast.

You must also know end point. In fact, there is no way to find m.e.c. w/o determining fncl. maturity too. A neglected point.

All my articles now must be directed to macro-econ. "Fncl. mat. & def. of m.e.c." wd. be a good one. Also, "L.v. & m.e.c."

Is m.e.c. affected by ΔP of land? I once hit Hiley for saying so. Let $mec = \left[\frac{R_m + O_m}{C_o + O_o}\right]^{\frac{1}{m}} - 1$. It is true, ΔO wd. occur regardless of use, but it needn't be held, & it may take both incentives together to warrant holding it. Those who hold for long pull are motivated by ΔV to use land less intensively, or not at all. But in bldg bus., bldrs. can hold for 2-5 yrs. and count ΔO as part of return, thus stimulating building. Likewise some buyers.

This may require greater awareness by builders than by land sellers of possibilities for ΔP. But my Indiv. Time postulates don't apply smoothly here. Bus. non-builders have no source of income to suppl. ΔP, builders do, so they will outbid. Bradley.

Will higher i. reduce total new invmt., as well as shorten structure of prodn?

ARC file.

Mature timber as e.g. of large static cap. input, no dynamic input.

Growing timber, cattle, etc., in yr. of no sales, is there turnover? What is cap. input?

Electron

Graviton

So why not

Storitron

Funditron

Valitron

Leg. Terbergh, Bogey --

~~Attacks~~

Opposes Keynes view that
rapid depreciation means depression.

So he might just tie it in
w. replacement policy

Items in UBC proposal applicable to CRA proposal.

Effects of uncertainty on turnover

Is it good that bldg taxes, like timber taxes, discourage durable invmts?

Spillover effects. Induced invmt. Fuller use of public cap.

Factor proportions. Equate with intensity of land use?

Develop 3-way analytical framework. Land unit is base.

Thus if you have cap./acre & labor/acre, you have cap./labor

Develop homogeneous land unit for this?

"Intensity" of land use better conceived as value added/acre.

Thus keep "dormant capital" from biasing mine. But value added has fuzzy edges, too. A house, e.g., might be regarded as imputed cap. – depreen. shd be netted from value added. Only income. If labor works on site, is value added there. Horiz. impn., a impn over time, better work in. If fertilizer works there, is not ... except for income, excess of return over cost. OK.

Can solve otherwise, by annualizing cap. input.

But that isn't reliable, since lign. isn't at steady rate.. Cap. input = depreen, higher in earlier years.

A tall bldg reps fast turnover if it doesn't last long.

Bldg. tax depresses l.v., thus may slow turnover as much as accels. However, it is possible to liquidate most of a bldg's value, then retain the old shell to collect land rent.

also, bldg tax lowers i, thus slows turnover.

However, if we follow the whole pattern, probly does slow turnover. Bcs renewal blocked, we get migration, cap. moves out to dev new sites. Thus a larger % of cap. goes into social overhead w. slow return. And l.v. are made even lower. But not immed. evident – they rise at first, cycle problem.

Hi l.v. at time of bldg causes a substantial structure to go up. It is hi l.v. under old bldg that causes renewal. So land cycle may cause durable bldgs w. much cap. when l.v. hi. Too much cap. per site. Then site value drops, cap. liquidates slowly, or is lost.

"Replacement" ≠ demolition & renewal. Rate of depreca. &/or amortn, & what is done w. the money, is more relevant.

But I have difficulties. Lower site values mean more of return is amortn, less is inc., so, while they slow demoln, they speed up ligu. and, as other land is abundant, demolition not needed to release new sites.

Answer I think is that ask'g prices simply stubbornly lag, remain too hi, for long time. Low prices don't become major problem until several yrs. Falling prices are a long problem. holdouts

---

Cap. fmtn. Relations to turnover. Substn between — & turnover. Can it occur along w. employment & thus force much?

Balance-of-payments. Cap. export ... we lose cap. that way, too. brings on or helps bring on crisis. But return of cap., if accomplishable, may alleviate a depression — British bldg boom in '30s?

Effect of scatter on factor propns. Requires much more cap., form of social overhead. A stimulating invmt. opp. for a time, but of a kind that ligu.s self so slowly that the comply niches created can't be filled; & there lacks a steady flow of new investable funds from ligu.

In Keynes, "I" comes from nowhere ... an assumed fund so large that no drawdown affects it, is a flow res. that merely needs to be forced into use, like land in George's system

But there is no such magic fund. In my system, replacement is an indep. vble that triggers off multipliers. I.e. when a big replacement surge impends, ΔI, $\rightarrow \Delta C \rightarrow \Delta$ Ign. and so on in multiplier pattern

---

The "intersite" sector -- a good concept. Xpts, basically. Not an absolute 4th factor, as Isard wd. have it – there is xpts internal to ea. site, too.

Varying replacement rates & developmental instability.

Housing replacement & instability. The longer houses last, the smaller % we replace yearly. If $\bar{x}$ life = 100 yrs, replace 1% annually. Now a small shift in replacement causes large % shift in building. If last 20 yrs, replace 5% yrly.
Also, shifts in growth rate are less of a shock.

Use above e.g. to show sub. of cap. & labor, thru durability of product.
Hi $\dot{i}$ means less durable products, more freq. use of labor.

Bldg. houses doesn't gurly rep. cap. fmtn., but conversion. Paying off mortgage reps. cap. fmtn.

Cap. fmtn in human skills gurly looks like consumption in N.I. accts.

Say we replace 2% d.u. each yr, & Δ by 1%. There's 3%. Now demand can Δ 2 ways: faster growth; or faster replacement. This is gurly recognized re cars, etc. (& causes abuses, planned obsolescence) Is recognized re consumer demand for specific items. Move from this to cap. in gurl., held by others. But also, play on "consumer-determinism" school bias, begin w. prop. cons., affected by replacement. In fact, monetary consn isn't that. is often invmt. in cons. durables. The more durable, the lower is future p^c.

"Consn" is largely replacement, too! Replace food, clothes, shelter, xpttn. Can also augment them. "Cons." is affected by structure of cons. capl. Food must be replaced steadily. But if I get to where some of my assets are not liquidating --- say I cons. $10,000 a year, & cap. is $30,000 (+ a $5,000 lot that never turns over) Now I overbuy on housing, so I consume only $9,000 next yr i.e. house doesn't melt fast enough ... ? Brodez.

Say we first live in a trailer, 5-yr. life, cost $5,000, so pay c. $1,000 a yr for housing, w. 20% annual turnover. We have our other ~~$30~~ $25,000 in boats, cars, horses, ski togs, dresses & suits, which we replace every 3 yrs as they wear out.

Now we change way of life. Live off cap. for 3 yrs, put $10,000/yr into $30,000 house, to last 100 yrs. Then ....

(When you buy a house, how do NI accts treat that? Cons?)

. . . . (then) we no longer need replace cap. so fast. Devote 1% of $30,000 to mntnce, keep house forever.

Now, less pressure to spend. At first, go ahead, furnish house. But more & more, just save.

Why did we buy the house? Low i. (THA, etc.) Our assets grew, too, so we didn't have time to enjoy --- ?

Difference betw. cons. & middleman. (commerce & indy), cons. rate of lign. limited by income. I.e., w. $30,000 assets, & $10,000 inc., cons. can't turn over $30,000 a yr., but only $10,000. Has no other way of liquidating & still mntng cap.

But C & H (wareholder) can speed lign., get more money, replace faster. Middlemen ∴ have elasticity, consumer don't. At least, cons. has ceiling on turnover, = $\frac{\text{inc}}{\text{assets}}$. also a floor, $\frac{\text{min. cons.}}{\text{assets}}$.

(Durable assets give consumer much more flexibility in spending decisions. Replacement demands are less importunate, even tho inexorable.)

Individ. wareholder has no such boundaries, but aggreg. whs do, altho lower. Having once hired all inputs, or enough so hp's rise, returns fall, they seek & find escape in future, more durable invmts. So A cannot ↓ A above what inputs can produce, as detd. by their quantity & quality. Upper limit on social turnover is $\frac{\text{max. inc.}}{\text{assets}}$; likewise a floor, $\frac{\text{min. cons.}}{\text{assets}}$. But spread betw. these limits is much greater for society than single individ.

Consumer's inflow to his cap. is his inc. So if he maintains const. fund, outflow = inc., & turnover must = $\frac{4}{7}$, where 7 ≡ 7 fund.

To change turnover, ∴ consr must: a, add to fund; b, let C ≠ 7. But to achieve (a) he must transmit thru (b)

Begin w. $\frac{1}{5}$, let C drop to 7,500, so R = $\frac{1}{4}$ ≡ Replacement rate

$R = \frac{C}{7}$, if 7 const.

When we lower C, we simul slow R to $\frac{1}{4}$; and create cap. of $2500/yr.

In 4 yrs, we can restore C to 10,000, & turnover is $\frac{1}{4}$.

Let C_R ≡ Real cons. by consumer

C_M ≡ Monetary consn, replacing or adding to cons. capl.

To create capl, we show turnover. Any signif.? We signal ahead, real cons. cap. fmtn, by shifting assets to more durable forms. If I'm going to real-consume less next yr., I alter assets now, to prepare.

Buildup of cons. durables ∴ cd. signal lower C_M next yr.

Buildup of wareh. durables signals, defly, lower replacement spending next yr.

Where land fit in? If one company shifts all assets to land, its turnover ceases, but no net effect, just a shift. Can a whole ec. convert cap. to land? Can sink it in land-enhancing projects. Can ↓ relative value of land ÷ all assets, & weaken incentives to hold real cap. can give cap. to indivs. as ↓ l.v.; they regard as inc. & consume. Can ↓ rent, thus ↓ cap. needed to force land input.

Illustrate by island idyll of alpha & Beta. Popn. of α isle has 50,000 slugs, fund of cap. B-isle, rich ress, unpopd. ~~Then~~ α govt. decides bridge the strait of Parsimony, tap B. Grants land to all vets, redheads, & descendants of founder. Bridge, estd at 10,000, but consumes 25,000 slugs. L.v. rises to 100,000, great gain. But, can't be consumed. And grantees regard as inc. Sell, & consume. Or just consume other assets. & Even if they aren't so corrupted, ec. has only 25,000 slugs left, for usual fns, plus devg new land. (Might have recovered invmt by selling or leasing land, taxed nation's cap. But made nation's cap into indirect income)

Much of 50,000 slugs were dormant, so 25,000 can do much. But now, settlers move over. Require more cap. Pay more int., get funds. Borrow on bi l.v. ...

Anyway, ec. has shifted assets into land, or the opptnt ... no need quibble. If gov. had sold land, or taxed it, to pay off bonds, wd. have returned cap. to circn. But it keeps perpet. bonds, no turnover there. (And 2 pvt. assets created by one invmt., l.v. & bonds)

Later rise of rents under old bldgs: a, reduces cap. recovery, but it all becomes inc. b, opens new invmt. opps as land is cleared; c, causes cap. to be very durable, tall bldgs.

Excess capac., universal, can it mean anything. If factor X, unknown, causes unempl., results in unused capac. Doesn't follow the unused cap. is Factor X. More likely, is a bottleneck, not a surplus.

Analogy. If body blood turned into more arteries, not enough blood to fill (over)
What is scarce? Not sunk cap; liq. cap.

As this situation creeps up on us, why don't compensating forces correct it? Cum. ones must be more powerful. Hi ↓ ... p.w. builders insulated from it. Hayek. Etc., w. land. Half-finished invmts compel completion, will pay very hi to fructify. scatter, etc.

Later, maybe lo cons. a problem, as cons's. loaded w. durables. cap. turns over slowly. Maybe Hayek was right in '20s, Keynes in 30s? Dubious, but explore. Hayek conjectured that frustration of cons. in '20s wd. lead to reaction, over consn. a problem in 30s. Maybe led to lower replacement demand by whs & cons's both. Effect on cons's (short for — men out in their capacity as cons's) wd. be little ofd. to effect on wh.

So I boil down to a simple model. Begin w. real terms and, W. Mitchell's wins.

Employers freeze assets, can't pay this yr, so some go unempld. Except w. wins easy to thaw.

Some problems. ~~Indivisible liq cap~~

Irreversible commitments

Cumulating "

Indivisible "

Need for liq. cap. to thaw out frozen cap?

So can have unemplmt. Mgrial workers leave. Cap. abandons less profitable areas. Etc.

Lower "hire" (for all hired inputs), raises resid. of cap., shortens invs.

them, wd. not say had surplus arteries, but defic. blood.

Whatever became of descendants of old docs who bled sick men? Are now cents, pouring life blood of the cc. away in fruitless p.w.

Analogy in growth proces. Blood carries bldg mtrls to end of line, & there lays them down to lengthen line. They coagulate. Needs then also build more blood; or stronger heart, to ~~p~~ circ. it faster to do its work. But if get carried away, lengthen lines at expense of blood & pump, woe betide.

Also, to speed circn, need short, wide arteries. Long ones, thin, cannot speed circn. Our pattern of growth is like that

Nar the xition to monetary expression. Does money grease wheels, buffer, absrb shocks, so such impasse not possible? Wh go ahead & hire factors, w. money, they buy wares. Faster turnover of inc.

Bet will they? ~~They spend to~~ Whence the money? Most invmt is reinvmt, timed to replace antcid sales. More durable goods means slower replacement. Only net new invmt. cd. fill gap & maintain inc. & maybe not even that.

(Wareholder, w.h., w. slower inc., cam - Δ c.b., slight effect, incidental)

But why shd not I Δ? Or C? No reasn.

Keynes clears his model system, as thru clearing house, to nets. ~~Eli~~ Formally valid, but if thing cleared out is in fact indep. vble & gentr applies leverage to whole system, is misleadg.

So: replacement needs of w.h. slow. He spends less, ∴ sells less. Inc. falls to pace of lign. detd. by physical durability of cap. stock, plus whatever factors are willing to save, plus services w/o cap., direct. As people now live too far apart, & are too specialized, to employ everyone at anywhere near his present productivity in swapping services, last is limited expedient or recourse.

How about forced Δ I of money? Might result just in goods inflm.. But might cause some good. If there is enough elasticity in cap. stock, so com speed up lign, get along w. smaller inventories ÷ sales. And if the forced Δ I isn't diverted into more frozen elephants.

Slow replacement isn't entirely due to physical nature of capl. stock also instl. E.g. command. stockpiles, to valorize. Conforms to gurley, tho — was a form of diverting compn to future.

[Another problem, w.h.s may liq. w/o replac'g, pile up cash, (or repay loans.) Disinvest, i.e., in M sense. Probly this is 2dry. in size, & in chain of causation. I stressed it in past, bec is bigger liq. trap than net sav'g. Bett is merely retiring a small loan from factors to w.h.s. Is bad ... emplmt requires reverse.

But while this liq. trap is recognized as such, larger problem is not: stalled renew. due, not to selling off wares, but hvg. none to sell.

More work needed. Balance & perspective.]

Return to Lincoln outline.

Our system leads to 90% liqn. of bldgs. replace elsewhere, bring in new lands instead of renew'g old. Thus get many sites renewed slow. Say 1% a yr., ave bldg "lasts" 100 yrs. Potential in - stability very hi. Flexibility low (vs. Lessingen)

So as our cap. turns over, it migrates. Space & time. Bett as it spreads out thin, it turns over slower; & factor propns shift, require more cap. of all kinds per worker.

Doesn't really spread out thin, anyway. Strews out — unevenly. Intensively, among vacant sites.

Do hi l.v. or rents accel. liqn.? Yes, c. II Not of depreciating bldgs. Not even in plann'g stage? (Demolition isn't liqn.) IQ of site make diff?

What causes excessive durability? Freedom from int. & taxes; subs'g for land; misdirection of invmt, so liqn. impossible; etc.

Factor props. 2 aspects. Cap. intensive maybe mean w. large machine; or durable machine.

Trouble w. ΔM to Δ real turnover, assumes seller has option of turning over. No doubt he can stretch things a little, but if basic problem is in structure of real cap., ΔM doesn't help. Isn't assum'g full empl. of hired factors: bottleneck is consumable or liquefiable cap.

(Emergent, on-verge-of-melt, thawing, almost-thawed, thawable, ---- "liquid" alone wd. be ok, but means money to most. Quasi-liquid soluble, ~~solvent~~, ~~visc. id~~, ~~glutinous~~, ~~emulsive~~, deliquescent, slushy fusing, fusible, liquefiable. (No word "meltable".); decompose, disembody "The fusible cap. melts". "The soluble cap. liquefies, or dissolves." 2d better, bcs emphasizes need for solvent? But melt'g also absorbs heat.

Yes, hi l.v. speeds liqn. Requires higher cap. input/acre, & cap. input is deprec. Requires ∴, more deprec./acre.

Of course, that may not speed it, if also requires more dormant cap./acre.



It simply makes the land supply go further. But, query, wd. seem to call for simul: a) more cap./a; b) swifter renewal. If so, doubly prompts faster turnover. Altern. is, may prompt more cap./a, but slower renewal, then less net effect in doubt.

May be some doubt about bldg shells, but as to merchandise, fixtures, interiors, etc., "the latent" is found where l.v. higher. (or where new land is devd.) Rapid & continual renewal of Manhattan seems in point.

Man w. large machine works w. much fusing cap; w. durable machine, much dormant cap. Fusible cap. complements its opr. more & doesn't hurt its producers; dormant cap. subs. for producers, w/o compl'g opr more & by 4g gross output. (It might also sub. for him less.)

When talk of factor propns, are 2 ways to msre cap.: current fusings; & total value. Makes b'g diff.

Marble art galleries may be most durable, least fusible cap., w. lowest emplmt mults. Mausoleums worst of all. Take as bête noire! Tombs, caskets, headstones. Cap. & land lost forever.

ARA outline: "Local policies to maximize empl. mults."

Nat. benefits from local redevmt (& taxes?)

Possible quick article for Jnl. "I.r., factor propns., & unemplmt. policy"

1. Define cap. input $C_a = C_n\, i\, \frac{(1+i)^{\tau-n}}{(1+i)^{\tau}-1}$

2. Demonstrate $-\Delta i$ surprises us by lowering cap/land. (I haven't yet done so, even to my satisfaction.)
And, as might expect, reduces labor/cap; also labor/land. ~~pretty~~

3. ~~If~~ Lo-i policy won't have exactly effects gnrly assumed.

a. As among firms, those w. strong forces. They use more cap./labor bec. cap. turns slower (lower reinv. frequency). Use less cap./land. Even tho pile it higher to begin, release it slower.
a fortiori, ∴, much less labor/land, over time.

b. As macro policy, lo-$\dot{i}$ tends make all firms more like lo-$\dot{i}$ firms. Slow turnings of nation's cap.

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1. q., static & dynamic, are useful concepts re factor proportions.

Capital & employment, outline. A book I want to write, beginning now.

1 How to use cap. to employ more labor

Make it more comply to labor. Labor-intensive uses. [If land is cheap, also land-intensive uses]

a. Fast turnover. (Wicksell)

b. Labor-complementing

1. By land-substituting -- intensifying land use

2. By opening new lands -- extensifying " "

(Both 1 & 2 can be interpd. as land-subbing - maybe that is essence. Try to work out - still has a puzzlement.)

Note that (a), also, is land-subbing. Just as shorter use of cap. means less cap.-intensive use, so it means less land-intensive use, bcs. each periodic shot of labor uses less land-time.

2 Relation of thesis to wages-fund thy. Refutation of wages fund thy, & irrelevance to present

2a Relation of thesis to Hayek's doctrine of overlengthened pd. of production, cap. structure elongated.

3 Inadequacy of monetary manipulation to effect Δ real turnover

a. Total faith in money turnover as cause of real turnover. Monetary & fiscal policy.

b. Some truth, maybe. Money illusion. Transfer of fixed cap. & land, doubleme, seemingness — no subst. for real turnover

c. Relation of thesis to prevailing macro-ec. doctrines.

~~Ref~~

4 Obstacles to achieving full empl. by adapting cap. to complement more labor.

Thesis implies a free ec. has automatic solution for unemplmt. Surplus labor, raises profit rate, shortens cap. structure

Why doesn't it work?

5. Instl. changes necy to make cap. complement labor & adapt optimally to absorb unemployed.

Fiscal policy - Δ real turnover by Δ profits, more important than Δ spending. Fiscal pol

Project for Rf 7

Resource renewal

(& resource taxation)

Kefaleon - capital

Tamion - fund

GS-14: 13,618 to start
14,065

after 15yrs. 17,215 with no promotion

GS-15: 15,065
to 18,270

"Nimble" capital.

also a transitive verb,

to nimble capital, e.g.

cornify

ossify

coagulate

somatify

solidify

grow (by accretion)

flesh

protoplasm

"somaplasis" .. body-formation

precipitate

Joan Robinson, THE ACCUMULATION OF CAPITAL, 1958

Cites some discussion on "what Hayek called the 'Ricardo effect' -- the relation of real wages to the most profitable 'length of the period of production.' Articles by Kaldor: "On the theory of capital, a rejoinder to Prof. Knight," ECTA 1-38; "Captl intensity & the trade cycle," Eca 2-39; "Hayek & the concertina effect", Eca 11-42.

She also comments on Wicksell, p. 396. "Wicksell follows Bohm-Bawerk in using the length of the period of production to stand for what we have called the degree of mechanisation. Even when he brings fixed capital into the argument, in the example of axes, he thinks of a rise in the real-capital ratio as being due only to investing in more durable axes. (Lectures, Vol. I, p. 276.) This is not a point of major importance; an increase in the length of the period of production or in durability of plant are special cases of an increase in the degree of mechanisation, and Wicksell uses them only as a simple illustration of the general case."

Thus she doesn't see the conversion frequency idea at all. She substitutes an inferior and vulgar and less definable concept, mechanisation.

She finds Wicksell "mystifying" exactly when he begins to make sense to me, when he says dwages lengthens pd. of production because interest enters into cost of capital goods (so, the more durable the machine, the smaller is the wage component relative to the interest component of cost, and the greater the relative desirability of durability.)

She cites two other works, of Wicksell. VALUE, CAPITAL, AND RENT, a new English edition; and "Real Capital and interest," on Dr. Akerman's problem, included in Vol. I of LECTURES, English ed.

To illustrate turnover, use card deck, return top card to btm, distinguish fund & flow.

Or, discuss rate of evapn. of wtr. from n pails on a heater, & depth of wtr in pails. Put all in one pail, much slower turnover.

Instant gratifi-n, deferred retribn. ... truly excellent analogy in illeg. preg.

Business Trends

Steel Prices: A Question Mark

Are steel companies going to make another attempt to raise prices?

A few industry observers think so, pointing out that some steelmen may be "laying the groundwork" for a price boost if the new contract with the steelworkers union this spring brings on higher wage costs.

As one veteran Pittsburgh steelman puts it: "The industry has been kicked around so much that it might try something rash."

But most steel makers and users say the chances of a price boost sticking are almost nil. Reasons:

▶The market price for steel has been weak.

▶Higher prices might cause more customers to turn to cheaper steel from abroad or to such domestic substitutes as plastic and aluminum.

However, automakers and other steel customers aren't taking chances. They're beginning to stockpile the metal—just in case.

A Package From Congress

The "truth in packaging" bill has a fair chance of passing this year.

That's the opinion of Congressional experts, who point out that the measure has important backing in the Administration.

The bill would require, among other things, a clear label on the front of a package telling the exact quantity it contains.

It would also bar such words as "jumbo" and "king size."

A new Bureau of Labor Statistics survey turned up the fact that 38% of all family expenditures on nondurable goods would be covered by the proposal—including canned and packaged food, housekeeping supplies, and other personal items.

Growth at Home and Abroad

A study of economic growth rates in Europe is being launched by the man who convinced President Kennedy that a 5% rate in the U.S. is probably out of reach.

Economist Edward F. Denison will do the analysis for the Brookings Institution, hopes to finish it in about eighteen months.

He expects to find out not only why growth in European countries has been faster than it has been in the U.S., but also what the pattern for the future may be.

Denison created a stir last year with a monumental survey showing that a U.S. growth rate of more than 3.3% a year would be extremely difficult to achieve.

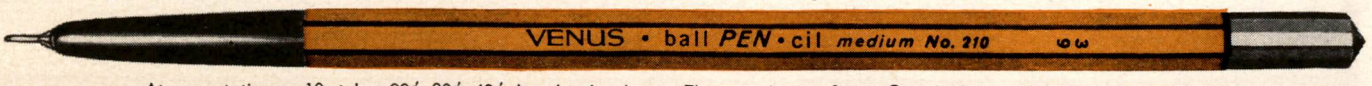
His finding so impressed the Administration that it lowered its growth target, started talking of 4% as a good number to shoot for.

Off the Ticker

Retail sales rose to a new record rate of $20.3 billion last month, up .2% over January and 7% above February 1962 . . . *Industrial production remained* at the January level, 119% of the 1957-59 average, last month . . . *U.S. wool producers lost* their two-year struggle for special protection from imports. The White House won't raise tariff barriers . . . *Strikes cost* the U.S. 2.3 million man-days of work in January . . . *South African plant* owned by Bristol-Myers (pharmaceuticals) near Johannesburg may have to be closed because the government didn't approve of the company's buying a one-minute commercial in a CBS report on South Africa.

Manufacturers anticipate a sales increase of 2% in the first half of this year, a Commerce Department study shows . . . *A&P chairman* Ralph Burger, 73, says he will retire soon but has not announced his successor as chief executive officer. A&P also expanded its board from twenty to 25 by adding five "outside" (nonemploye) directors. The outside group had complained in January that the food chain's top echelon was getting too old . . . *One out of every three* General Electric stockholders got his shares through the company's employe savings plan, GE reports . . . *Blue Note:* Suffering through Europe's coldest winter of the century, Parisian strip teasers made their employers list colds as an occupational hazard.

We left some space so you could write your arm off trying to make our new Venus ball PEN·cil run dry. Write small.



At your stationer. 10 styles. 29¢, 39¢, 49¢. Less by the dozen. The new, longer Super Camel ink-cartridge. Pat. No. 2,678,634

Man made work can be permanent. Road cuts in rock, as permenent as nature.

Can also obsolesce, like Panama canal or Croyet tunnel.

Danger in such work, being cap., never recover, at mgn. No turnover at all.

Recovery of capt. is a nec. but not
sufficient condition for
reinvmt.

Land income is a flow.

Capitalization converts it to a fund, but really doesn't. Just makes it commensurable w. funds.

Cap., a fund, differs in that can be consumed immediately, while l.v. is not a fund, but the image of a flow. Can never be consumed. Liqu. can be speeded a little, by sacrifi'g timeless modules for imminency, but even that is not comparable bec there is no consumption of a fund.

Needed words / Valence ; valor, a unit
"Valule", ≡ value-module

Quantum Unit of Value. ("util" is subjective)
~~Valorit~~

Unit of labor. Virquent, Laborquant
(Terraquent)
" of land-value. - Geoquent. Cadent
(Rentquant)
" of fund-value:
Geol. fund. - Nugget
art. f. fund. - Module

Standard
Cadastral valence module, S.C.~~V.~~V., or standard acre.
Based on forecast highest use, at one i.r. (valences will vary slightly according to what i.r. is chosen.)
(Annual valence, a rare subvariety... bec. usually must look beyond one year.)

Standard fund valence, SFV. One "measure" of capital. 2 varieties, timeless & discounted: module & valule, respectively

Unit — Numéraire.

Monad — Measure

Share

Module — Worth

Quantum — standard-acre

acre-equivalents

There is precedent for coining words.

Keynes "wage-unit". "Utils."

Monad & module both have the spiritual quality desired.

all 3 can be used, for different levels of value. Land-module wd. apply to subdivided ~~the~~ & improved land: land-monad to raw land.

Unit of Capital; or "fund"

Fund-unit

Monad

Module

Atom

~~block~~

dose

nugget – ok for unit of geologic fund

~~nucleon~~

~~gottop~~

lump

cantle

nub

el logro - gain, profit

Correlative words:

logarithm (re growth thru time)

allegro (emphasis on speed)