think of any direct benefits that they draw from the Exchequer. Their advantage stems from the very cheap grain on the British market. The cheapness, or weakness, of our grain market stems from the weight of home production, now over sixty-five per cent. of total supplies, as against fifty per cent. five years ago. It is this weight of subsidised, badly sold, grain that keeps our market depressed and makes our other suppliers subsidise their exports to us.

True Cost

It is difficult to estimate the true cost of the cereal subsidy. The actual deficiency payment has been about £6 a ton latterly, to which must be added a share of the fertiliser subsidy, equal to about 30s. a ton, plus the indefinable benefits of the other grants I mentioned above.

Remove all these and production would be bound to drop and prices rise, and where would the broiler growers be then?

So the actual determinations of the Price Review are really only the visible tip of the complex ramifications of the whole subsidy system. They are the more important financially, of course; the others could be described as subsidiary but necessary to the working of the exercise. It all started with the best of intentions back in the war as a means of keeping down food prices in times of scarcity. It was never meant to be a system of price maintenance in normal market conditions. So compromise has been piled on compromise until the resultant tangle is such that to unscramble it would defeat the wit of man.

The Shifting of Farm Benefits

Second extract from The Benefits of Farm Programs: Incidence, Shifting and Dissipation

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PIECEMEAL ANALYSIS of each farm program shows the systematic bias for land owners, but beware the fallacy of composition. Critics of the land owner-conspiracy approach have long pointed out that new lands opened up by public works, etc., compete with old lands for customers and men and supplies. Higher yields from land owner-oriented research tend to flood markets and lower prices.

The obvious power of land owners over individual decisions may lead us to over-estimate their aggregate power, and lead them to their own undoing. Land owners are organised well, but not perfectly. They dispute the division of the spoils and each state has two senators wherewith to claim its share. The logrolling process therefore becomes the basic mechanism for allocating quotas and other benefits among the senators' clients.

Logrolling is a process whereby we generally get more military bases and river and harbour improvements than we need. Is it not to be expected, by analogy, that interstate rivalry for production rights would lead us to grant more than a monolithic and calculating monopolist would allow? It is the nature of the political process to give away more than there is. It is the nature of cartels to stimulate excess capacity. Here we have a mixture of both.

Some analysts have alleged that lower costs of production will be passed on to consumers. But prices are determined by supply and demand. If land owners could control aggregate supply they could capture and keep all the benefits of lower production costs. Whether benefits are shifted depends on what happens to aggregate supply.

In a very few programs supply is effectively controlled. Tobacco is the outstanding case. Most other programs suffer from serious leakage. Farm commodity groups face the classical problem of all cartels, the price-umbrella syndrome. Organised owners of superior resources cut back output to maintain price, and under this "umbrella" outsiders expand output and find loopholes to invade the sheltered market. The cartel expands to control the interlopers and new ones appear, until a final dissolution which leaves a legacy of excess capacity, much of it irreversible. Economic history is littered with the corpses of cartels thus destroyed by their own machinations.

The farm-commodity cartels are rather more vulnerable to over-expansion because their Board of Directors is the Congress of the United States, which includes the voices of fifty major and countless minor jurisdictions, plus the increasingly restive consumers. So, politically, the stage is set for expansion. Economically, there is hardly a stage within which several commodities cannot be produced at support prices. The long-run supply elasticity of farm products is high, within the relevant range. Let us enumerate several reasons why.

1. There is ample marginal land to bring in, wherever



politics allows it. In a few cases, like tobacco, land as such has almost ceased to be a meaningful constraint on

output—only the right to use it has value. In some contexts we may properly speak of land as fixed in supply—in tax matters, the supply in one taxing jurisdiction is fixed. But in commodity matters land is versatile. Since "farm" programs are specific commodity programs, all land used for other commodities may be transferred over. In the Tulare Basin counties, for example, there



are thousands of acres in alfalfa and pasture, using four or five feet of water per year, just panting for the signal to shift over to cotton. In the nation there are millions of acres of cropland in pasture.

In the aggregate, the supply of farmland is of course less elastic, but yet quite responsive in the long run to high prices and advancing knowledge and technique. The quiet resurrection of the dust bowl through adaptation of culture and species to local conditions is one of the monuments of our times. The conversion of badly-drained hardpan Putnam soils of central Missouri to firstclass cropland required mainly better traction and cheaper lime and nitrogen. Alkali "wasteland" around Raisin City, California, is now growing cotton and grapes, thanks to gypsum and lower water tables. Deep-well turbine pumps and cheap rural power have re-opened many desert lands to settlement. In all states, expansion and improvement of the state and local networks of rural roads and utilities has brought immense new land supplies into contact with the market.

2. Political-economic power attaches to many marginal lands. The owners have the muscle to claim that combination of public works and production rights that rations out shares in the American way of life. Beveridge's "Free Coinage of Western Senators" is only one example—its effect on the westward movement of farm production is not hard to trace.

Some marginal lands, especially hardscrabble hill lands, attract the politically inert. Other lands, presently submarginal but potentially superior, gravitate to a very different kind of owner. These lands fall to "strong hands," to those who can afford to pay a present price for a remote future chance of great gain, and who know how to bring political pressure to assure the gains. The west side of the San Joaquin Valley, and the Mississippi Delta, are cases in point. The strong hands provide political leadership and money. Many weaker hands provide votes. Together they keep bringing new lands into production.

3. "Marginal" land often produces high yields per acre. "Marginal" land evokes the image of low yields,

frequent drought and crop failure and the like, and to be sure that is one side of it. But land may be marginal because of high costs rather than low yields. It may be separated from its market by high transportation costs. It may require heavy capital outlays for water supply or drainage. It may need heavy doses of labour or fertilizer, or heavy farm investment in trees, stock or buildings. And then it may outyield superior lands by many fold, even though its net rent after costs is close to nothing.

The marginality of lands should not be described or measured in terms of yields, nor yet in terms alone of net rents per acre. To foresee the effects of price changes, we need to know the *ratio* of non-land costs to gross revenues. The *difference* of those two is net rent: their *ratio* is an important supplemental datum which I will christen the "intensity quotient" (henceforth "i.q."). Marginal land of "high i.q." answers to what some writers have described as land of "high capacity and low efficiency." My excuse for new terminology is expository—emphasizing the ratio helps bring out important leverage effects.

The net rent of land of high i.q. is highly leveraged. If i.q. = .95, a 5 per cent. rise of price means a 100 per cent. rise in net rent. If i.q. = 1.05, the land is sub-marginal but crosses the threshold of use when price rises or costs fall by more than 5 per cent. And when such land enters the game it throws on the market outputs that answer not to its low net rent but to its high gross yields. It is the vehicle, if you will, by which large numbers of nonland inputs enter the market on a minimum base of raw land value.

The prototype of these marginal lands of high i.q. are irrigated lands in the arid states. They are far from the market, they require artificial water supply, and, in some farm enterprises, they absorb large inputs of labor and private capital per acre. They could flood the Chicago and New York markets with potatoes and apples and vegetables and other western specialties without beginning to return to their owners a net rent at all commensurate with their share of the market. Most of the value is added along the way by non-land inputs and non-farm inputs.

The arid states are the type, but not the whole genus by any means. There are also marginal lands in the East and Midwest and South. Land may be remote not just because it is at the end of continental transportation lines: it may be beyond the local networks. And within the farm it may be remote from the center of storage



and operations. Or it may require unusually heavy inputs for drainage or fertilizing or stabilizing. The loose economy of land which has characterized our entire national experience has left a latent reserve of by-passed acres in all regions. Much of the marginal land is high i.q., with high gross yield per acre.

In analyzing aggregate national and world supply, the farm-to-market transportation input should certainly be counted heavily as a non-land (or non-farmland) input



that leverages the net rents of land at the end of long hauls. It may be just an accident of geography, but it is yet a fact that our greatest national reservoir of good soils fans out west of the Ozarks along the tier of prairie states, speciously central yet increasingly remote from major populations on the two coasts. These are high-yielding lands, too, and a small percentage price rise can convert many of them to feed grains, with overwhelming results. Perhaps we should describe much of this as transfer of land from pasture to plough rather than extension of the margin, but the effect on output is much the same whatever we call it.

Here we should note the differential importance of price stability to the usability of high i.q. lands. The higher the leverage on net rent, the greater is the value of price stability to a land owner, because the greater is the percentage reduction in variation of his net income. One aim of price support programs is, of course, stability. To the extent that they succeed, they do more for high i.q. land than for low. If we include transportation among our non-land inputs, we find high leverage lands further from markets. Since the area of a circle increases with the square of its radius, and since the great mid-continental Golconda of prairie soils is far from markets, price stability acts strongly to bring on new lands of high gross yields.

4. There is also great supply elasticity from superior lands, through elevation of their i.q.s. This is, indeed, the most commonly cited cause for the impotence of acreage restriction as a supply control. We pour more non-land inputs onto limited acres and discover that a slight rise of price or drop of costs can lead to great intensification. Lands that Hammar thought had "high efficiency but low capacity" now, it seems, also have high capacity (as he had originally suspected when he first wrote of their surprisingly low man-land ratios). The latent capacity simply was not fully used.

Here, again, our concept of i.q. provides an easy explanation. Suppose—and this is realistic—a farmer has a choice between two different intensities of land use,

A and B. A yields slightly less net rent per acre, but at a low i.q. of .50. Shifting to B means higher net rent, but at the cost of a much higher i.q. of .85. He might very well prefer A. High i.q.s are uncomfortable and risky: a slight fall in price and one is wiped out; a strike or labor shortage can be disastrous; bad weather is murder. Or the farmer may have taken too seriously the bad advice of certain public servants who advise us to maximize benefit-cost ratios on public works—that being comparable to minimizing the i.q. The low i.q. enterprise—barley or onions, for example—yields much less than the high, but it yields a safe, steady return each year without acute management problems and with plenty of slack to cover mistakes and contingencies.

Now suppose we support prices 15 per cent. above their former level. The .85 i.q. enterprise now nets twice as much as formerly, the .50 i.q. enterprise only 1.3 times as much. That tends to overcome the land owner's natural aversion to risk and worry and entices him to lay out more for non-land inputs. Leverage! How little we have appreciated its latent power to multiply yields. Give the farmer a place to stand, and he can lift the world.

A recent Iowa study of corn yields concludes that Iowa alone could supply the nation's output of feed grain if only all farmers improved their practices to the standard currently observed by the most advanced managers. It is not likely the other states will soon give her the chance to prove it; but it gives a notion what giants in the earth we stir when we pry open the gap between prices and costs.

In sum, the supply of farm land in the long run may be regarded as quite elastic to price and the supply of farm products even more so through substitution of non-land for land inputs, or intensification. It may be, then, that the complex of farm programs is playing the same kind of ironic trick on land owners as the Homstead Act we centennialized three summers ago, and its associated subsidies to hasten rail penetration of the heartland. The railroads, you recall, each worked to raise land values near the routes, but in the aggregate brought in so much land as virtually to destroy its unit value by the 1880s and 1890s, bringing on Populism and Bryan. Is that what the omens now portend?

MODERN HISTORIANS PLEASE NOTE!

FROM all that we have witnessed for twenty years past, it appears to be a sort of inveterate policy, inherent in all land-owners and great farmers, to exclude the labouring husbandman from the occupation of even the slightest portion of land. The late outrages in the country parts of England might never have happened if the system of land monopoly, under the insulting title of "agricultural improvement," had not been almost universally adopted throughout the Kingdom and encouraged by men of high rank and fortune.

-From "150 years ago" in The Observer, June 26.