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Rigging the price of silicon chips

The agreement signed last week between Japan and the United States will not in the long run keep Silicon Valley healthy, and meanwhile will be a recipe for trouble.

ONLY a few days after one of the largest steel-makers in the United States, the conglomerate LTV, ran for the shelter of the US bankruptcy laws, trade officials in Washington were foolishly celebrating last week the agreement they have negotiated with their opposite numbers in Japan to regulate the sale of semiconductor memory chips between their manufacturers. The coincidence is striking and also chilling. LTV has been driven into queer street by the long decline in the demand for steel when the world is swimming with the capacity to produce the stuff. During much of that time, the US government has done what it can to protect the domestic industry from overseas competition by a variety of restrictions on the free import of steel. Voluntary quotas have been negotiated with European steel-makers, while the policy of protection has been stiffened by the usual array of anti-dumping suits in the courts. The result is that the US steel industry has been kept alive, but only just.

Technically, the industry has limped along, maintaining existing plants without the funds to improve them to a point at which they might compete effectively with steel-makers in Japan and Korea. The companies involved have in the process been locked into a declining business when their long-term interests would have dictated diversification. What has happened to the US steel industry is yet another proof that, in a competitive world, protection is more often the kiss of death than a safeguard. How soon will this truth be demonstrated in the manufacture of silicon chips?

The new agreement is believed to cover something like 90 per cent of the semiconductor manufactures supplied by Japan to the United States. All the bread and butter in the trade will be regulated, but, almost by definition, the regulations will not apply to the most advanced components, those so novel that competition has not yet developed and whose lucky manufacturers can charge what prices they choose, not to mention the chips not yet invented. The agreement binds both signatories to ensure that chips are not sold for export at prices other than those defined as fair, which implies that manufacturers will have to recover in their prices not merely the marginal cost of production but also a contribution towards the capital costs of the plants in which chips are made.

Technically, the agreement is a recipe for endless bickering. Difficulties have arisen about the prices charged for chips because of the huge difference, in a capital-intensive business, between the marginal cost of production and that which fully amortizes the cost of the equipment with which chips are made. Who will now decide what production overheads are fair? But in practice, the effect of the agreement promises to be unambiguous: prices of chips of all kinds will be increased for everybody, often substantially.

For a time, no doubt, there will be rejoicing in Silicon Valley, the Californian hub of the US computer industry. Small companies whose backs have been against the wall for months on end will be able to walk tall again, sheltered from the formidable competition of Japanese manufacturers by increased prices. The new deal may not restore the full excitement of the 1970s, when for a time it seemed as if Californian entrepreneurs had stumbled on the modern equivalent of the philosophers'

stone, a way of turning silicon into gold. But there will be fewer lawyers preoccupied with the intricacies of Chapter XI, the provisions of the bankruptcy laws that allow a company to keep trading while protected from the most pressing claims of its creditors. Undoubtedly there will be a spell of months and possibly years, during which the sales of the US chip-makers will increase, both in volume and in profitability.

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Japanese manufacturers will be compelled to compete in other ways, two of which are easily foreseen. First, they will pay even more attention than is their present custom to the quality of what they manufacture and put on the market. Second, compelled by the agreement to charge more for what they sell at present and thus made even more profitable than they are now, they will invest even more enthusiastically in novel semi-conductor devices. A few years from now, Silicon Valley will probably still be a high-cost producer, but may well have lost its present reputation for daring design behind the shield for foreign competition now being provided. That is what has happened to steel manufacture in the United States.

Meanwhile, the economic cost of the new agreement will be felt throughout the world. To prevent manufacturers in Japan selling cheaply into the United States through the intermediary of third countries, price-fixing will apply to chips sold by both Japanese and US companies in, for example, Europe. One result will be that the prices of electronic equipment will be increased. Another will be that European chip-makers will enjoy the benefits being showered on Silicon Valley at a crucial time in their strategic history, when the case for making chips indigenously is stronger than it has ever been. Whether European companies will ever be able to match those in Japan in quality and cost is an open question, but now at least they will have an opportunity to do so. Is that what the United States intends?

That the new agreement will not serve its intended purpose, but others that cannot accurately be foreseen, is beyond dispute. Yet one malign side-effect is easily predicted. To the extent that the new agreement on chips establishes an inter-governmental cartel for the regulation of prices in international markets, it will be an awkward precedent that is bound to come to haunt the United States, hitherto an admirably staunch supporter of the doctrine that free trade is the only effective means of arriving at an economic division of labour in the world. Which other governments, in respect of other manufacturers, will now be tempted to follow suit? All they will have to dissuade them is the example of the Organization of Petroleum Exporting Countries (OPEC), now in collapse along with the price of crude oil.

Selling the family silver

Turning public into private enterprise is fashionable, but not best done by public servants.

LORD Stockton, previously Mr Harold Macmillan, last year startled the British government which he supports politically by reproving it for "selling the family silver" in order better to balance its accounts. The circumstances are now familiar, and by