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Barter, Countertrade, Buybacks and Offsets:

A Crisis in the Making

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Barter, countertrade, buybacks and offsets are not new. Indeed, money was invented, quite some time ago, to alleviate many of the more obvious inconveniences of those venerable forms of trade. For the longest time, they have been treated as marginal phenomena in a dominant and expanding system of monetized international trade. The enduring persistence of barter has always been acknowledged, but it was usually located in situations of greater interest to anthropologists than to economists. It was assumed to grow up quickly under conditions of disorder, but also presumed to disappear quite as quickly once normalcy had been restored. And of course, barter, like so many other primitive and bureaucratic practices, was taken for granted as somehow incurably part and parcel of any deals with centrally planned economies. Just as suburban homeowners were known to get together and swap services in episodic but heroic efforts to cut the taxman out of his take, international barter was seen as wrong, potentially upsetting to the system, but so truly a marginal business that it was no cause for concern as long as it was kept within bounds.

But barter and its more elaborate varieties such as countertrade, buybacks and offsets have broken out of any imaginable bounds. Like some disease-causing microbe once thought safely eradicated by modern science, they have made a startling comeback in the past few years, and they now pose a challenge to the rules, procedures and structures of international trade. Estimates of the extent of these practices vary widely. The U.S. Department of Commerce estimates that between 20% and 30% of world trade is now subject to some form of counterpurchase, buyback or offset, and that the proportion could reach 50% in fifteen years.[1] In surveys by the National Foreign Trade Council Foundation, the number of reported transactions involving some form of barter has been increasing at rates of 50%, 64% and 117% respectively in each of the past three years.[2] Business Week and the General Electric Trading Company each independently estimates the volume at 30% of world trade,[3] while the GATT, in a recent report, makes by far the lowest estimates: $160 billion annually, or 8% of world trade.[4] As the volume of world trade is about $2 trillion, any point on this intolerably broad band of estimates (the high estimates being more than three and a half times the low) constitutes a staggering sum --especially for such an obscure and ill-regarded "marginal phenomenon."

When variance is in the hundreds of billions of dollars, we know two things. First that something big is going on, and second, that we have no control, not even intellectual control, over it. The imprecision of the data is significant for policymakers as well as for economic statisticians. It demonstrates the lack of careful study of a substantial change in world trade patterns, and of even more fundamental changes in the economic roles of governments that lie behind it. Economic and business accounting conventions such as balance of payments and corporate accounting are largely blind to countertrade because they are designed for a cash and credit economy. The complete inappropriateness of these basic economic information systems is likely, fairly soon, to be the cause of unwelcome business, economic, and ultimately, political drama.

I

Barter is a simple phenomenon. I will exchange a thousand barrels of crude oil for a given quantity of specific chemical solvents. Countertrade is rather the same, only the seller --let us say a German producer of electric turbines-- is given a broader menu of products from which to choose those items he will take in exchange. For instance, the seller may be obliged to take payment of 50% or 100% or even 150% of the value of equipment sold to Indonesia in the form of any Indonesian product --except.oil. Buybacks usually refer to the seller of a manufacturing plant taking a specified quantity of the future output of that plant as his payment. Offsets most often refer to a still broader category of non-cash payments. In exchange for our purchasing $200 million of your telephone switching equipment, we ask you to locate production of a semi-conductor plant in our country that will produce $100 million per year of memory devices, of which half will be exported. The techniques can be melded together; for example, in addition to the offset plant, you will also take as part of the payment package 40,000 barrels of vegetable oil, thirty tons of smoked ham, 50,000 wicker chairs, and perhaps some of our own cou.tertrade obligations to dispose of Indonesian carburetors.[5]

Countertrade would not be a very substantial phenomenon if all international transactions were conducted company to company. without government playing a directive role. The swift acceleration of countertrade to its present importance and its continuing rapid growth are indicators --even a measure-- of the extent to which the nation state now directs the terms of international sales and systematically sets policies and rules to influence the terms of supposedly private bargains. There simply would not be very much countertrade unless some nation state (the buyer) dictates that access to its market can be gained only by sellers willing to take payment in countertrade or to provide offsets.

Countertrade deals are elaborate, inventive and extremely diverse. No two deals are identical. Each is created to circumvent an obstacle, or to slalom through a set of obstacles. The tighter the situation the more original the deal. Poland is therefore, doubly interesting. It is an Eastern bloc country that generally seeks countertrade to move its less easily marketable exports. It is also as strapped for hard currency as anyone in the world, with its export earnings for the near future, the far future, and also the hereinafter mortaged to Western bankers. Gabriel Wujek, of the Polish Embassy in Washington, recently described how countertrade provided a way for Poland to purchase industrial equipment from the West. An apple pulp factory in Poland needed equipment that could be provided by a number of Western firms. Due to the debt crisis, however, no US banks were willing to supply the necessary financing. An Austrian bank came to the rescue. The bank guaranteed the promissory notes, so the manufacturer (now an Austrian) could go ahead with the sale. The bank then made a deal with the Polish authorities to receive a substantial portion of the apple juice produced by the new plant. It took on the obligation of selling the apple juice in the West. Everyone gained. The Austrians got business they wouldn't normally have gotten. The manufacturer was able to charge a far higher price than a normal market transaction would permit. The bank got fees that were a large multiple of those generated by just opening letters of credit. The Poles got their apple processors. Everyone gained except perhaps the holders of the Polish debt who thought export earnings would go towards servicing the debt, the American manufacturer that lost the sale because its bank was not organized to accept payment in apple juice, and the Polish apple producers (or perhaps taxpayers) who overpaid for the machinery.[6]

Let us take, for illustration, another Eastern bloc example. According to the IMF, McDonnell Douglas in partial payment for aircraft equipment it sold to Rumania found itself with, among other countertraded items, a rather stupendous supply of canned ham "which the firm's staff is expected to munch its way through at the company's canteen for years to come"; while the Algerian wine that Caterpillar Tractor took on in countertrade, and found itself unable to sell, "was served in the company's cafeterias for many years."[7]

But countertrade is not confined to Eastern bloc countries. NATO countries --as well as third world countries-- invariably demand offsets (production of the same or a different product located in their country) as a counterpart to arms purchases. Almost one half of US aerospace exports now involve countertrade in some form or another.[8] According to William Evonsky, Manager of Countertrade, Offset and Barter for the General Electric Trading Company, during the 1960s the average countertrade obligation was about 35% of the value of the expected sale. During the 1970s that figure increased to almost 60%. At present, the average countertrade or offset requirement exceeds 80% of the value of the expected sale, and sometimes the commitment exceeds 100%.[9] As a result of a number of recent large export sales --in particular, aircraft engine sales to Sweden and Spain, GE's countertrade commitments now exceed $2.2 billion.[10] Countertrade is not even confined to goods. Services, are beginning to enter the game. Deerfield Communications (USA) took payment from Jamaica in the form of data processing services.[11]

The instances flow. Indonesia recently legislated countertrade obligations of a very strict sort onto any major purchase and the take-back goods cannot be oil, or any other product that would "displace Indonesian cash sales."[12] Mexico is making major steps in a similar direction.[13] Israel has just changed the name of its countertrade authority. The Central Authority for Reciprocal Purchases, which requires foreign suppliers to the Israeli public sector to buy Israeli products worth 25% of the value of the contracts they receive (and the buy-back must be in industrial, not agricultural goods), is now known as the Board of Industrial Cooperation Agreements. Austria (as a buyer) has worked out offset purchase agreements with a host of western companies. "The engagement of the foreign suppliers to buy in Austria is strictly voluntary because of the Austrian dedication to free market and free trade." But McDonnell Douglas has been taking offset production in partial payment for an airplane sale, and a similar system has been worked out with Airbus for the purchase of aircraft later in the 80s. The Austrians have also worked out similar arrangements with auto makers --including arrangements for Japanese cars where offset purchases result in percentage reductions of import duties.[14] The list of countertrades can be very long, the arrangements, very intricate.

II

The growth of countertrade is not merely a new wrinkle in traditional economic transactions prompted by superficial--and transient--events. Behind it lie fundamental changes in the structures of the international economy. The most important is the rise of developmental states as primary actors on the international scene, and the imitation of their methods in sector after sector. by more traditional, "regulatory" governments.

By "developmental state," a term first and best used by Professor Chalmers Johnson in his excellent study, MITI and the Japanese Miracle, we mean countries where the central and ordering principle of government is the direct promotion of national economic growth and power. Japan invented and perfected the modern form; other countries have been quick to copy-- or to adapt aspects of the system to their own circumstances. Governments as diverse as Brazil, France, and Korea have acted to create advantage and alter, in enduring ways, the international competitive position of their national firms and economies. These efforts by governments to shape outcomes in international markets challenge the very premises of the open trade system. They make the distinctive capacities of governments and their willingness to support their national firms an element in the market competition among those firms. As a result, international trade has become less and less the private actions of private companies operating by market rules and constraints and more and more the instrument of national development policy. Where not too long ago international competition pitted the strengths and capacities of companies against one another, the competitive equation now includes the capacities of governments to shape market outcomes -- and crucially, their ability and willingness to use those powers. Across a very broad range --from such pure cases of developmental states as pre-1975 Japan through such intermediate cases as Brazil to such open, but interventionist economies as France-- governments control (or significantly channel) the strategic allocation of capital to industries and try, to the best of their abilities, to control what enters and leaves the country. One major focus of such activity is the arrangement of international trade deals to serve domestic industrial purposes. And one instrument increasingly used to serve that goal is the structuring of countertrades and offsets.

Reinforcing this principal cause (that trade and investment is more and more an instrument of active national economic development policy and less and less the affair of private buyers and sellers), is a confluence of additional sources that swell the stream of countertrade.

The first, and most important, is the rapid growth of international trade in big-ticket, sophisticated armaments. International arms sales are estimated at some twenty-five billion dollars, with the United States way out in front, selling some forty per cent, followed by the Soviet Union solidly in second place at about thirty per cent, and France holding on to third place with about $5 billion in export sales in a good year, as the UK, Germany, and Italy eagerly seek to increase their sales, and Japan waits in the wings.[14] For some of the newer arms-merchant nations, such as Brazil and Israel (exports, respectively, an official ________billion and a good deal more unofficially) the armaments industry is a major focus of governmental development and trade policies.[16]

> "In many ways the arms trade is the model for the new mercantalism. The market is characterized by discrete, giant contracts, rather than by marginally adjusting commodity flows. A large initial sale --say for a fighter aircraft-- locks in a large stream of follow-up sales for such items as spare parts, up-grade kits, support equipment, and training and maintenance services. Armaments is the sector where it is most difficult to distinguish between economics and politics, between the state and the private sector. Governments are the clients --they buy the arms. But they are also the key economic players on the sellers side."[17]

The arms sector is probably the largest generator of countertrade and offset deals, with about one-half of US aerospace exports subject to some kind of countertrade or offset and quite likely an even higher ratio for the other arms exporters. Not only developing countries but such developed and market-oriented nations as Canada, Belgium and Holland routinely demand --and get-- major compensating offsets before they will make an armaments purchase. Indeed, it is the growth of offsets in the arms trade that is prompting the first serious American enquiry into the extent and consequences of countertrade. The U.S. Congress is beginning to hold hearings on countertrade in the armaments sector.[18]

The need to manage surplus capacity is a second major reinforcing factor in the growth of countertrade. When productive capacity exceeds demand at price levels that permit sustained production and employment, companies scramble to sell their goods in imaginative ways. Sometimes they resort to "dumping." When overcapacity is felt in a range of industries important to the economics and politics of nations -- such as steel, autos, textiles, dairy, aircraft, and oil-- governments act to assist sales and sustain employment. They also act, quite as frequently, on the other side of the transaction to demand some non-market benefits, such as offsets or technology transfers, in exchange for access to their markets when their nationals become important buyers in overcapacity situations. Countertrade arrangements are a favorite device for such overcapacity situations, in part because of the extreme difficulty of putting a simple market price on a complex countertrade transaction.

Dumping --pure and simple in substance, but opaque and elaborate in form-- is, of course, a major motive for the surge in barter and countertrade. Gary Banks, who is writing the briefing book that will serve for initial discussions by GATT members in their efforts to begin to formulate a countertrade policy, is quite clear. "The main attraction for countertrade for dumping or price-cutting purposes" he writes "is its reduced transparency. In trade with non-market economies," Banks argues, "it is already difficult enough to determine from price information whether dumping has taken place, in particularly for manufactured goods." But, he notes, "this need not mean that some additional opaqueness would be unwelcome."[19] When the objective is to unload discretely, primary commodities that have been stockpiled, then countertrade can serve as a technique to dump or to cut prices. The marketing of surplus commodities appears to be the most dominant objective. "The problem is that when markets soften, many commodity producers are barred from slashing prices to market-clearing levels by international commodity agreements as well as by fears of anti-dumping measures."[20] Barter can provide a means by which individual countries may dispose of their export surpluses without having to stipulate the price. Eroding real prices, in the face of international commodity agreements such as OPEC, generate an increase in barter. Thus one can speculate about the motives behind the sudden proclivity for oil-barter deals in Nigeria, Iran, Libya and Indonesia --the four OPEC members worst affected by the recent oil glut. And the recent gigantic barter deal between Saudi Arabia and Boeing raises similar concerns. Saudi paid for the Boeings in oil-- not cash. We know the spot price of a barrel of oil, and the quantity of oil Boeing received. The question is the price of a Boeing 747, and that of course can vary considerably depending upon the terms of sale and the way the aircraft is rigged-out. At the end it becomes difficult to determine the price of either the aircraft or the oil, and that may be the reason for both parties deciding on barter. (The bauxite for powdered milk deal betweeen the U.S. and Jamaica in 1983 also excited some controversy in this respect.) The strongest evidence of an intent to dump or to get around price agreements can often be found in the agreements governing such transactions, which frequently contain a clause forbidding re-sale of the bartered products on third markets!

Barter was also encouraged by a sharp increase in funds for countries pursuing ambitious and state-centered development strategies in the mid-seventies. For some countries, mostly OPEC nations the funds came from trade; for others, such as Brazil and Mexico --and also Eastern Europe -- they came from borrowings. Their suddenly expanded role in international trade translated as an expansion of the role of state-controlled trading. Trade transactions were increasingly used as extensions of government development policies. Thus buy-back agreements increasingly became the price for sales of the production plants that embodied national development and import-substitution strategies.

Economics is not physics. In economics an opposite cause can very well produce (or reinforce) the same effect. Just as the sudden and vast increase in "free funds" in the 1970s --mostly loans or oil revenues to countries with ambitious, government-oriented trade and development strategies -- increased the volume of state trading, barter, buy-backs and countertrade, so, ten years later, did the even more sudden drying up of those funds. The weakening oil market has been an important accelerator of countertrade, but more important is the Latin American debt crisis. As hard currency has all but vanished from the major trading nations of Latin America, and uncommited Free Money dried up in the OPEC nations, governments have turned to countertrade --and the state controls of trade they developed in the earlier cycle-- to control the volume and kind of imports. Companies --both importers and their foreign suppliers-- have become rather ingenious in living with and sometimes circumventing those controls through extremely elaborate countertrade deals. Indonesia has been a pioneer in erecting rigorous countertrade obligations for large sales into Indonesia. Countertrade requirements are 100% of the purchase, and must not be taken in goods that Indonesia would normally export without the countertrade deal. Mexico is now trying to copy the Indonesian model, and is instituting countertrade requirements at a substantial rate, and Malaysia, finding that Indonesian countertrade promotions come at its expense is now instituting a similar countertrade policy for defensive reasons.[21]

Expanding trade with East Bloc countries was an important stimulus for the growth of barter in the 1970s. The volume of Western exports into Eastern Europe multiplied from $6 billion in 1970 to $26 billion in 1980.[22] This spectacular spurt in trade was fueled by loans from Western banks, and much of it took forms other than simple market transactions, with offsets, buybacks, and countertrade deals figuring prominently. A most recent, but quite typical arrangement, has been the Volkswagon deal to construct an automobile engine plant in East Germany and take engines produced in that plant as payment. The institutional capacity developed by German companies, banks and specialized trading companies such as Metallgesellschaft in their trading with Eastern Europe has served as a base for the further development of countertrade with such nations as Indonesia and Brazil. But the continued expansion of countertrade in the 1980s cannot be explained as a peculiarity of growing East-West trade because, beginning in 1980, the volume of trade with Eastern Eruope began to fall --from 26 billion in 1980 to 18 billion in 1982,[23] -- as net lending by Western banks to Eastern Europe dried up.

III

The view of barter as exceptional -- as well as exceptionable -- remains dominant. Barter is still seen as overwhelmingly related to short-term expedients and fundamentally bounded by time and scope, even though those boundaries are so terribly relaxed at the moment. It is a way to circumvent temporary difficulties caused by currency crises, or by excess capacity that generates disguised, though tolerated dumping in third markets. And of course, it is accepted as an enduring practice in the special and circumscribed domains of trade with the East Bloc and trade in armaments.

Barter is an expedient, a means to survive bad times. But once the tactic becomes part of competition, even the strongest competitor will, sooner or later be obliged to follow suit. In this view, which fits nicely into conventional modes of economic analysis and leads to conventional policy formulation, barter is part of an overcapacity problem. The sources of its sudden expansion are on the producers' side, and so will be the causes of its contraction: the extent of the practice should diminish once excess capacity is written down, the world economy picks up, and special problems, such as the hard currency problems in Latin America, are settled. Normal trading practices -- so much more flexible, swifter and cheaper -- will then return to their rightful position of dominance. And so will normal, traditional market shares and trading patterns. Except that some producers will find their traditional markets flooded with years of accumulated countertrade obligations, and once the flood works down, re-entry will be extremely costly and, perhaps, impossible.

This conventional view of barter often carries the additional hypothesis that some producers. especially in less developed economies, may lack marketing skills and resources. Consequently they may be willing to let prices shift against them in order to transfer that selling task to their trading partners. Through countertrade, they are paying for marketing in a disguised way. This, essentially, is an adaptation of a classical argument. It finds that there exist substantial imperfections in the market for international sales expertise and facilities. The condition should also self-correct in a reasonably short time, as international trading companies grow to fill the need. And indeed, they are. Such powerful international trading companies as Metellgesellschft and Mitsubishi are expanding their countertrade operations rapidly, and new players. even American industrial firms such as GE and GM (but not IBM), and American banks such as Bank of America are opening countertrade divisions.[24] The new countertrade specialist firms in effect, remonetize barter. That is, the producer company saddled with extraneous commodities as part of a transaction can, for a fee -- often considerable -- transfer the responsiblity for sale of those goods to a specalized trading company. As no sensible trading company wants to get stuck with unsaleable commodities (such as the pink telephone dials GTE found itself holding in exchange for a sale of telephone equipment to Poland,[25] the countertrade specialists are increasingly consulted <u>before</u> the deal is concluded. The producer can then calculate the deal in more traditional financial terms. An international barter mart (and there is occasional talk of one opening in Amsterdam), to function as a clearinghouse for multilateral swaps of palm oil, peanuts, pliers and pants. would be a major step towards formalizing the restoration of the market.

An alternative explanation of the growth and function of barter is more interesting and more threatening to the international trade system as currently constituted, because it suggests that barter will be more permanent. In this view, international transactions are not necesarily about exchanging one product for another as in classical trade theory's example of Portuguese wine exchanged for English wool. Ricardo assumes transactions are between private actors. If transactions are not about exchanging wine for wool, what are they about? When governments are involved trade may be about the use of political power to alter a nation's economic structure, that is, the profile of what it produces. Governments intervene in the wine for wool trade, not just to get the wool cheaper, but to control access to its national market for wool products for the deliberate purpose of gearing up domestic companies to produce wool and sweaters too. Trade is then about strategic efforts to change a nation's economic situtation, to re-position its industry in the international division of labor, wealth and power. It becomes not a short-term, self-regulating game of optimal use of the world's resources for maximizing consumer welfare, but a long-term, strategic game about the Wealth of Nations. The Brazilian petrochemicals story and the competition between Airbus and Boeing illustrate this view particularly well.[26] Japanese semiconductors and computers, a few years back, were a parallel illustration; so were French process engineering, Saudi petrochemicals, Korean steel, Brazilian automotives, and Japanese aerospace. Once again, the list can be made very long.

IV

The policy implications are two-fold. The first is that barter tactics may affect the competitiveness of American companies. The second is that a mini-version of the third world debt crisis may be preparing itself, as unknown but substantial quantities of countertrade obligations pile up on the books of major industrial companies.

1. Feeling both that countertrade is basically wrong and should not be encouraged, but that American industry is at a decided disadvantage in countertrade against such institutionally organized and experienced players as the French and the Japanese, the U.S. is moving in several different directions at once. In the government, different departments take different -- and contradictory -- positions. "Treasury says it is 'flatly opposed' to it; Commerce helps companies do it, the Department of Labor objects to it, and the Ex-Im Bank has no policy for dealing with it."[27] In Congress, legislation has been introduced both to curtail countertrade and to encourage the countertrading of U.S. surplus commodities (mostly agricultural) for foreign strategic minerals.[28]

The response of American business is also mixed. Some companies, most prominently, IBM, simply stay away from any form of barter. Most others, feeling threatened by substantial losses of markets unless they accept barter deals, are reluctantly engaging in such transactions, while others are greeting it as an opportunity. Such manufacturing giants as GE are actively involved in barter deals all over the world and are using their experience to set themselves up in a new line of business as trade and barter specialists. The Export Trading Company Act of 1982 is proving to be an important instrument for creating American countertrade specialists. Enacted to encourage exports --especially by small and middle-size US companies who lack international trade experience -- it has lead to the rapid creation of American export trading companies, including bank trading companies, to compete with such established giants as C. Itoh and Mitsubishi. Within the past two years or so, such major American firms as Sears, First Chicago, and Bank of America, have established (or, like GE, substantially beefed up) export trading companies. And though the Sears venture has folded, new ones continue to be created. Many of them are actively pursuing countertrade deals. The Bank of America Trading Company, for example, estimates that a full one-third of its business will come from countertrade.[29]

2. The scale of countertrade obligations (that is, the quantity of goods that U.S. companies are obliged to purchase from foreign producers and dispose of) is an unknown. Last year the Treasury Department circulated a voluntary survey among major defense contractors. Some twenty-six companies responded but there is no way to know which big ones did not. The sum of such obligations they held exceeded $10 billion.[30] Completely informal and unofficial enquiries indicate that some major U.S. companies are each sitting on substantially more than a billion dollars of such obligations.

It is quite possible that firms -- such as GE or United Technologies or McDonnell Douglas in the U.S., or Aerospatiale in France or C. Itoh or Sumitomo in Japan or whoever -- have collectively (but unknowingly) agreed to move exports out of particular countries far in excess of what those countries have ever --or will ever-- export. This could mean that on the books of those companies sit dubious assets of colossal proportions: millions of dollars of non-oil Indonesian products, or Portugese non-vegetable oil, non-cork and never-before-exported products, carried at values far in excess of that which could conceivably be realized.

The absence of any central data file on countertrade obligations -- organized by country whose exports various companies world wide are obligated to move, and by product -- could help precipitate a minor international crisis in a fairly short time. It is uncomfortably reminiscent of the lack of any central intelligence on Latin Amrican debt a few years back.

A simple measure that could be taken by the international community before it is too late would be to open a central countertrade information clearing house so that companies, banks and countries could know if they are about to contract to export Portugese shirts or Indonesian wicker or Malaysian sneakers at twenty times the quantity the Portugese, Malaysians or Indonesians have ever exported. It would also make interesting reading for the traditional suppliers of those countertraded commodities.

footnotes

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17. John Zysman and Stephen S. Cohen, "Double or Nothing." Foreign Affairs, Summer, 1983.

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21. See *Countertrade,* 21 Nov 1983, on Mexico; 16 May 1983, and 24 Oct 1983, on Indonesia; 12 Sept 1983 on Malaysia.

22. United States Central Intelligence Agency, *Handbook of Economic Statistics,* Sept 1983, table 69.

23. *ibid.*

24. See *Business Marketing.* Jan 1984.

25. *ibid.*

26. See Cohen and Zysman for Brazilian Petro.

27. *International Marketing, op. cit.*

28. See speech by Ed Barber Trade Finance Foreign Affairs Officer at the Treasury to Institute of International Trade and Development, Oct 1983; see HR 3544 and S 1683, "The Barter Promotion Act."

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30. *ibid.,* Aug 1983.

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