Foreign Direct Investment, Political Resentment and the Privatization Process in Eastern Europe

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1. INTRODUCTION

Six years after the iron curtain was lifted, the countries of eastern Europe have yet to recover from the transformation shock. Aggregate output remains below its 1990 level, and aggregate employment in central and eastern Europe (CEE) is down by roughly 16%.[1] The more advanced economies – Poland, Hungary, the Czech Republic and Slovakia – have lost over 30% of their jobs since 1988.[2] Communist governments have regained power in several countries.

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[1] Vienna Institute for International Comparisons (WIIW), *WIIW Handbook of Statistics, Countries in Transition*, 1995, and WIIW database. For this paper, CEE countries comprise Albania, Belarus, Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Moldova, Poland, Romania, Russia, Slovakia, Slovenia and the Ukraine.

[2] OECD, *Short-term Economic Statistics Central and Eastern Europe*, 1992; OECD, *Short-term Economic Indicators Transition Economies*, March 1996; OECD, *Main Economic Indicators*, July 1996.

FDI

Participation contracts would raise flows to eastern Europe

SUMMARY

Foreign direct investment has been disappointingly low in eastern Europe, which has been reluctant to make existing assets available to foreign investors. To mitigate any such resentment, we propose a participation model in which foreign investors compete for joint venture contracts. Host governments contribute existing assets and receive non-voting stocks. Foreign investors, contributing capital and know-how, receive voting shares and control of operational decisions.

This has several advantages over the cash sale of assets to foreigners. First, stock flow problems are eased, raising both asset prices and FDI flows. Second, by retaining some stake in the firm, transition countries share in the risk premium. Third, governments can hand over their shares to households, creating private collateral to foster new small businesses. Fourth, and crucially, compared to cash sales the auction of participation contracts offers higher privatization revenues in cases where governments cannot assess investors' knowledge and abilities. This reduces the risk of selling the family silver too cheaply, and should alleviate the host countries' resentment.

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The low level of foreign direct investment (FDI) has been a big disappointment. Eastern Europeans, lacking capital but with skilled labour and an abundance of natural resources, might have been expected to attract substantial FDI. In theory, given the continuing constraints on labour migration, mobile capital should have kept migrating to the east until its marginal product fell to western levels. With more capital, a higher demand for labour should have bid up eastern wages towards western levels.

Several forces undermined this simple arbitrage of international capital: difficulties installing the appropriate legal and institutional framework, without which market forces were unable to operate; insufficient funds for the public infrastructure that is a prerequisite for successful private investment; and substantial economic and political risk involved in investing in the east.

Moreover, CEE countries were also *unwilling* to attract too much FDI.[3] In transition economies, FDI has typically meant not greenfield investment, but the purchase of existing assets, usually during privatization of state-owned enterprises. Selling state assets to foreigners is often seen as selling the family silver and encounters widespread political resistance.

We describe the development of FDI, document resentment of it, and argue that this can be overcome by privatization strategies that raise higher revenues than cash sales do. We advocate FDI via a participation contract between the government and foreign investors subject to competitive bidding. The government contributes the asset to be privatized, and the investor contributes the restructuring capital necessary to adapt the old capital to the new market environment. Each party retains shares equal to the value of its contribution; in a second step, the government then distributes its shares to the population, using vouchers or other forms of distribution. Similar participation contracts have been proposed by Sinn and Sinn (1991), Bolton and Roland (1992) and Demougin and Sinn (1994) for transition countries' internal privatization processes. One variant has actually been used in Bolivia, following suggestions summarized in Sinn and Sinn (1993). The present paper develops previous analyses, all within a context of FDI and resentment of it. We will argue that FDI via this participation contract is better than other forms of direct investment: it generates more privatization revenue and provides better investment incentives in the host country.

2. WHERE IS THE FLOOD?

Since the fall of the iron curtain, FDI to central and eastern Europe has been a trickle not a flood. By January 1996 the total accumulated inflow of FDI into CEE countries (excluding East Germany) was only US$43 billion.[4] In absolute terms, this

[3] By direct as distinct from portfolio investment, we mean investment that also carries a presumption of *control*. In practice, this is usually taken to mean either award of explicit control rights or ownership of at least 25% of the equity.
[4] Source: UN/ECE.

was lower than FDI to just Argentina and Mexico in the same period, some US$47 billion;[5] in per capita terms, this is just one-third of the figure for Argentina and Mexico. Also in per capita terms, if one includes FDI from West Germany, FDI to East Germany was over 100 times that to CEE countries (Table 1), a discrepancy that would have been even higher if East German wages had not risen tenfold after unification.

Table 1 reports FDI into the CEE countries up to January 1996. Hungary, in absolute terms by far the largest recipient of FDI, had one-third of the total. In per capita terms, Hungary ranks second, behind Slovenia but ahead of the Czech Republic and Estonia. Even so, Hungary's absolute inflow of FDI was only $13.7 billion, compared with $219 billion received by East Germany.

Of course, the East German situation was unique. West Germany pumped huge amounts of public funds into East Germany – about 1000 billion DM up to 1996 – which then attracted private funds. Direct investors were not confronted with political hurdles. Indeed, privatization of state assets via cash sales to the most attractive bidders typically meant sales to West Germans. Measuring assets by the jobs entailed, only 6% of the East German assets went to East German investors,

Table 1. FDI to CEE and East Germany: cumulative to January 1996

Country	Total ($ USm)	Per capita ($ US)	Per capita as % of that in Germany
Albania	270	81	0.6
Belarus	331	32	0.2
Bulgaria	517	58	0.4
Croatia	1200	252	1.8
Czech Republic	5587	542	3.9
Estonia	646	409	2.9
Hungary	13740	1334	9.5
Latvia	485	181	1.3
Lithuania	352	94	0.7
Moldova	87	20	0.1
Poland	7843	204	1.5
Romania	1597	68	0.5
Russia	5875	39	0.3
Slovak Republic	726	138	1.0
Slovenia	2762	1399	10.0
Ukraine	891	17	0.1
Total	42911	130	0.9

Note: East Germany's FDI includes fixed investment by West German firms and Treuhand revenues received by selling firms; public investment not included. 1995 figure estimated by ifo-Institut.
Sources: UN/ECE, *East–West Investment News*, database; Treuhandanstalt, *Final Report*, 1994; Institut der Deutschen Wirtschaft, *Zahlen zur wirtschaftlichen Entwicklung der Bundesrepublik Deutschland*, 1996; *ifo-Schnelldienst*, May 1995; *Statistisches Bundesamt Wiesbaden, Mittel- und Osteuropa in Zahlen*, July 1993; EBRD (1995).

[5] IMF, *International Financial Statistics*, November 1997.

85% to West Germans and 9% to investors from other western regions. Surprisingly, East Germans showed little resentment of the fire sale of their assets. They were happy about the public funds they received from the west and did not worry about the redistribution of wealth that took place under the privatization programme.

CEE countries have no corresponding West Germany to which they can easily sell 85% of available state assets. This is our point of departure: the importance for FDI of political constraints and the importance of finding ways to relax them.

3. RESENTMENT AGAINST FOREIGN DIRECT INVESTMENT

The poor FDI record of CEE countries reflects many things. Insecurity about property rights and regulatory constraints is crucial. The return to power of communist parties has irritated investors no less than the frequent policy of diluting existing shares by privileged issues of new shares to insiders. The partial replacement of public police by private Mafia has done nothing to calm their fears. In most countries, neither a workable civil code nor a functioning legal system for settling private disputes has been created. Western policies have contributed to the problems. EU restrictions on trade in 'sensitive sectors' (Rollo and Smith, 1993) has discouraged FDI in the CEE countries, since potential declining industries in western Europe are precisely those in which CEE countries often enjoy a comparative advantage over the west.

While these aspects explain a low *supply* of FDI, they do not explain the surprisingly low *demand* for FDI. Appendix A illustrates, necessarily selectively, the mixed feelings in CEE countries about the role of FDI. They fear FDI makes a country vulnerable to foreign influence, a partial loss of sovereignty, and that national treasures are sold at fire sale prices to the west. Czech prime minister Vazlav Klaus asked foreign investors to wait until privatization is finished; his government has explicitly warned against selling the 'family silver'. In Hungary, opposition to privatization through foreigners has been growing. Polish privatization minister Gruszecki warned against giving foreigners too much preference in the privatization process; former prime minister Pawlak argued that he had tried his utmost to prevent foreign investors taking over Polish companies. Polish trade unions accuse foreign investors of employing 'slave labour' and taking away the 'family silver'. Russia has restricted the shares of assets that can be sold to foreigners and has made little attempt to withdraw discriminatory regulations that exclude foreign investors.

4. REASONS FOR THE RESENTMENT

Much of the FDI in the CEE countries has come from countries that were their enemies in the Second World War. Germany, the biggest direct investor, has invested nearly 50% more in the CEE countries than France, the UK and Italy taken together; Austria ranks third behind the USA. Table 2 confirms a strong bias towards Germany and Austria. Poland and the Czech Republic, which are making

Table 2. Major investors in eastern Europe (cumulated FDI to January 1995, US$m)

Source	Host country															Total
	Albania	Belarus	Bulgaria	Czech Rep.	Estonia	Hungary	Latvia	Lithuania	Moldova	Poland	Romania	Russia	Slovakia	Slovenia	Ukraine	
Austria	n.a.	6.7	22.0	216.6	6.7	1961.2	8.4	10.3	0.0	123.5	28.4	75.5	113.6	250.4	5.6	**2828.8**
Belgium	1.0	0.8	36.3	188.6	0.1	205.9	0.2	6.2	n.a.	60.8	4.9	11.4	0.9	4.9	5.2	527.3
Canada	n.a.	2.1	n.a.	n.a.	1.8	86.2	0.4	4.1	0.3	25.2	59.1	79.8	6.6	0.4	11.1	277.1
China	n.a.	3.5	n.a.	n.a.	2.8	1.2	n.a.	0.3	0.0	0.9	5.9	169.5	0.1	0.1	2.3	186.7
Croatia	n.a.	0.3	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0.3	n.a.	0.2	0.2	397.8	0.7	399.5
Egypt	n.a.	0.1	n.a.	n.a.	22.6	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0.1	0.0	0.0	2.4	25.2
Finland	n.a.	2.9	n.a.	n.a.	58.0	21.6	30.5	2.2	n.a.	21.8	0.2	87.9	0.0	0.0	0.2	225.3
France	n.a.	2.9	12.1	355.6	0.3	507.7	0.2	1.3	0.0	105.3	104.2	61.1	38.5	178.4	6.6	1374.1
Germany	9.6	56.7	178.2	1113.0	8.6	2197.1	22.6	44.9	2.8	631.3	97.6	139.7	123.5	194.9	64.0	**4884.4**
Greece	37.8	0.1	33.1	n.a.	0.1	8.4	n.a.	0.0	0.8	14.3	26.5	14.2	0.2	n.a.	2.3	137.8
Italy	74.0	20.5	n.a.	92.5	3.1	465.8	1.3	1.5	5.1	166.3	101.1	45.3	14.1	125.5	8.3	1124.3
Netherlands	n.a.	4.0	57.4	n.a.	4.6	1111.1	15.5	3.6	0.0	371.3	78.5	45.6	36.9	7.4	7.7	1743.6
Poland	4.0	53.5	n.a.	n.a.	0.5	n.a.	1.6	10.0	0.0	–	2.3	10.8	0.6	n.a.	11.6	95.0
Russia	n.a.	0.1	2.9	n.a.	45.4	n.a.	19.0	12.4	0.4	21.5	0.6	–	0.3	1.6	16.6	120.7
Sweden	n.a.	3.4	n.a.	n.a.	45.9	110.2	9.1	52.7	3.7	75.9	14.4	20.0	17.4	0.2	3.5	356.5
Switzerland	n.a.	9.3	50.6	136.7	2.2	383.1	18.4	8.4	n.a.	154.2	48.0	878.4	4.2	53.5	17.2	1764.3
UK	n.a.	8.3	17.6	n.a.	6.9	419.1	73.7	8.6	0.0	147.8	61.9	42.5	14.6	5.3	29.2	835.6
USA	2.0	44.7	25.1	651.1	17.0	1331.4	44.7	37.2	1.9	653.1	103.0	854.6	79.7	3.3	79.3	**3928.2**
Other	15.6	67.0	31.9	323.3	87.4	1097.7	70.6	38.3	9.6	266.2	490.5	478.5	100.4	29.9	93.1	3200.1
Total	144.0	286.9	467.2	3077.4	314.0	9907.7	316.2	241.9	24.7	2839.7	1227.1	3015.4	551.7	1253.6	366.9	24034.4

Note: Albanian data to January 1994.
Source: UN/ECE (1994, 1995).

Table 3. FDI investment by type (% of cases involving existing firm not greenfield investment)

Czech Republic	Hungary	Poland	Russia
67	60	37	63

Note: Sample of 162 firms.
Source: OECD (1994).

special attempts to encourage US and British investors as a counterweight, are particularly delicate politically: large parts of their territories once belonged to Germans and to the German or Austrian states. Resentment against a return of German and Austrian investors is understandable.

A similar resentment, with a different focus, exists in Slovenia and Croatia, historically under Italian sway. Both Croatia and Slovenia forbid Italian land purchases, but have encouraged German investors as a counterweight.

Resentment also reflects a fear that FDI will spoil the privatization process. Direct investment in the CEE countries typically does not come in the form of greenfield investment, but requires the sale of existing firms. The sale, it is feared, will occur at fire sale prices and give rise to the family silver problem. Precious assets will be handed over to foreigners who can make overly favourable deals that exploit the special circumstances under which the sales take place.

The bias against greenfield investment is unusual for, on a worldwide basis, investment in existing firms accounts for no more than 30% of the total flow of direct investment.[6] The privatization process explains the difference. Speed, lower investment cost, easier integration into existing trade networks, lower administrative hurdles and simply the abundance of assets supplied have contributed to a close link between privatization and FDI from the start. Foreign investors have always tried to participate in privatization and have been able to outbid domestic interests wherever they were allowed to use their financial muscle. In 1990, 95% of Hungarian privatization revenues came from foreign investors (Lane, 1994). From 1988 to 1992, 45% of all funds directly invested in Poland were connected with privatization. In the Czech Republic the figure was as much as 87% (EBRD, 1994). On average, privatization accounted for 60% of FDI in the CEE (UNCTAD, 1995a, b). Table 3, which applies to project cases rather than values, confirms that FDI has been concentrated not in greenfield investments but in acquisition of, or joint ventures with, existing enterprises.

5. ECONOMIC EXPLANATIONS FOR THE FAMILY SILVER PROBLEM

While some reasons for resentment of FDI are unfounded, overstated or unchangeable, the family silver problem is a matter of real concern. There are several reasons

[6] See Healey and Palepu (1993). An exception was the foreign direct investment received by the USA, of which 90% was acquisition in the period from 1988 to 1990. See Lipsey (1993).

why privatization offers overly favourable opportunities to western investors and why sales of existing assets are not a good way of attracting FDI.

Western investors may have better knowledge than privatization agencies about the true investment opportunities provided by the assets, and therefore may be able to outwit the agencies. While the information asymmetry cannot easily be avoided, we will show that there are ways to mitigate its consequences. A second reason is endogeneity of asset prices. Mass privatization is not the same as the marginal British or French privatizations of the 1980s. The latter could be managed from a business economics perspective, given the price level of competing assets and given the interest rate. Mass privatization, however, requires more than business economics because endogenous changes in market conditions have to be taken into account.

The most obvious change in market conditions results from the law of demand, the fact that price falls when the quantity supplied increases. If privatized assets are not exceptions to the law of demand, mass privatization must depress asset prices and create a windfall gain for the purchasers of these assets. The German experience with the Treuhand sales showed this very clearly. Leaving aside the agency's subsidies, its revenue from sales was hardly more than 50 billion DM, much less than the 600 billion DM revenue it had expected initially and less than a quarter of what a conservative estimate of just the value of the land sold would have suggested (Sinn and Sinn, 1991). Endogenous erosion of asset prices may not be a problem if domestic residents get the windfall gain, as in the German case, but it is hardly acceptable for the CEE countries if it is shared by foreigners. There are at least three reasons why the law of demand applies to privatized assets and why there is a windfall gain.

First, the asset risks are highly correlated and belong to the same risk class. The higher the supply, the lower the price must be if the expected rate of return to investors is to increase. The increase in the expected rate of return is necessary to induce investors to absorb more and more of the CEE assets into their portfolios.

Second, investors may not have unlimited access to the international capital market. They may be credit constrained and find it difficult to raise the equity capital needed to finance the investment at short notice. The problem may be reduced if the privatization is slow enough to make it possible for the required funds to be accumulated through profit retention. However, when mass privatization is carried out in a short period of time, say a year or two, there is a microeconomic stock flow problem which may result in a sharp erosion of asset prices.[7]

Third, there may even be a macroeconomic stock flow problem: no matter how high the domestic interest rate, the flow of aggregate savings may be insufficient to

[7] Even large private investors may be credit constrained. In 1994 Volkswagen, for example, announced the cut-back of its investment plan for Skoda. The reason which VW gave was not that Skoda was not profitable enough, but that losses of VW's Spanish subsidiary Seat made finance scarce within the multinational (*Financial Times*, 24 October, 1994).

finance in a short period the sale of the entire stock of state assets, except at distress prices or unless substantial foreign financing takes place. Limits on the latter lead to rises in domestic interest rates that further reduce asset values. This effect may still operate when national capital markets are fully integrated if many transition economies privatize simultaneously. The capital demand may then be large relative even to the global market. Even though we are focusing on CEE countries, one should not forget that similar events are occurring elsewhere.

6. THE PARTICIPATION MODEL

Despite reservations about FDI, it is too important and too useful for potential recipient countries to eschew it completely. Direct investment brings risk-bearing equity capital and know-how, opens up new markets in the west, provides the east with modern products that help raise living standards, and quickly imports a responsible and knowledgeable management. FDI is an indispensable ingredient in a successful strategy for economic growth and prosperity in the CEE countries. The participation model offers a way to realize these advantages without arousing the fears identified in previous sections.

The essence of this model is a joint venture contract. The government brings its existing assets, and the foreign investor adds the necessary restructuring capital and know-how. Each receives shares for whatever it contributes. No existing assets are sold. The government defines the necessary investment volume. Share values are determined in a competitive bidding process where investors have to specify the value they place on the existing assets brought by the government. The government selects the investor placing the highest value on the existing capital. Ideally the values of the shares retained by the government and those given to the investor will then reflect the true values of the respective contributions. The auction process is incentive compatible: the most competent bidder wins the auction even though the government is unable *ex ante* to monitor its ability. We study details of the auction process in section 7.3.

In a second step, the retained shares are given to the domestic population and employees.[8] Shares for the general population could be channelled through a mutual fund to diversify the portfolio risk. The Czech voucher method would be an ideal way of organizing the distribution process.

In principle, shares could also be retained for use in financing the government budget rather than given to the public. However, such a solution would miss the opportunity of creating wealth for the domestic population. By its very definition, communism could not allow people to accumulate private wealth. All accumulation was carried out by the state, and people paid for this by not receiving some of their

[8] See Boycko *et al.* (1994) for the importance of broad participation for the acceptance of privatization.

wages. A privatization process where the 'people's wealth' – however little it may be – is not returned to the people may be not only unjust, but also inefficient. A successful start in a capitalist market economy requires a broad group of people endowed with a nucleus of wealth, from which small private business can grow. It would be unwise not to take the opportunity of removing unnecessary hurdles for setting up new business and getting the economy going.[9]

How control rights are allocated is open to debate. The foreign investor will probably be interested only if the rights of domestic share owners, public or private, are limited to the bare essentials of protecting their equity: silent ownership by the domestic share owners will best stimulate FDI. The foreign investor should have full responsibility for restructuring the former state firm to face international competition. Even when the winning foreign investor is allocated less than 50% of the shares, it should obtain control over management of the assets.

The investor's incentives to run the firm efficiently are largely independent of the fraction of shares it owns: since it earns a fixed percentage of the total flow of dividends, it will want to maximize the profit stream on which dividends are based. Admittedly, there is a latent moral hazard problem. Some of the costs of management may not show up in a pecuniary form and may thus not be included in the firm's visible cash flow. To reduce the relative importance of this problem, it seems wise to limit the participation model to cases where the investor can be endowed with a substantial fraction of the shares, large enough to dwarf the importance of non-pecuniary aspects in the management problem.

The participation agreement should, in principle, be indefinite, just like the 'agreement' between the shareholders of any joint stock company. However, the management should have the right to issue new shares for further equity injections in the future, and this, of course, would then automatically alter the fraction of dividends earned by the public. Section 8 will discuss this in more detail.

7. ADVANTAGES OF THE PARTICIPATION MODEL

The participation model is located between cash sales of state assets and voucher privatization, between the 'German' and the 'Czech' ways. The German way solves the problem of corporate governance, but it bypasses the ownership right of the general population. The Czech way maximizes distributional justice, but it fails to create a dominant shareholder who will establish an efficient management. The participation model combines the two advantages. It establishes a responsible management and maximizes the wealth to be distributed to the public. The public

[9] It could be argued that it is better for the government to retain the assets because their returns offer a distortion-free source of finance for public goods. The problem with this argument is that it overlooks the basic asymmetry in the wealth distribution between the government and the private sector after the fall of communism. While ex-communist governments possess nearly all the economy's wealth, private individuals are paupers, unable to invest and unable to borrow. A market economy cannot start to grow out of such a situation.

gains more than with a voucher privatization because the investors who are brought in have the knowledge and restructuring capital to augment the value of the existing assets. The disadvantages of cash sales spelled out above can largely be avoided.

7.1. Mitigating the stock flow problem

Investors need no funds to pay the privatization agency for taking over existing assets. 'Payment' occurs as dividends later to the host country, which is strictly preferable if there is a shortage of funds available for direct investment today. The microeconomic variant of the stock flow problem will be reduced because more credit-constrained investors will be able to participate and because more resources will be available for investment that augments the firm's capital stock. The macroeconomic variant of the stock flow problem will be mitigated if many of the privatization projects of the CEE countries follow the participation model. Investors need fewer funds, the situation in the capital market is less tight, the interest rate is lower, and the present value of the cash flow is larger. Investors are willing both to cede a higher present value of dividends to the host countries and to undertake more restructuring investment.

The macroeconomic stock flow problem could reappear if governments compensate for the lack of immediate privatization revenues by borrowing in the capital market. However, in practice governments of transition economies are likely to be credit constrained. The lack of funds will result in a reduction of public expenditure or an increase in taxes, which will crowd out private expenditure. In either case, a lower burden will be placed on the capital markets than by cash sales.

7.2. Earning a risk premium

Paying the government with dividends means not only that the investor pays later, but also that it pays only if, and to the extent that, the enterprise turns out to be successful. The host country shares the risk involved in the enterprise. As a risk-averse investor finds this attractive, it will pay a risk premium to the privatization agency by putting a high value on the existing capital. Appendix B confirms that the participation auction generates a higher revenue for the government than a cash auction.

7.3. Joining the winner

Apart from earning a risk premium, a participation contract allows the host country to share the know-how that the foreign investor is likely to contribute. Cash auctions are very problematic in a situation where an efficient foreign investor competes with less knowledgeable domestic investors: the foreign investor will win by bidding just a little more than its domestic competitors without having to reveal the true value of the enterprise. This is the justified fear of being outwitted by clever investors. A participation auction mitigates this problem. The government shares in the true value of the enterprise through receiving the dividends actually earned. The risk of losing a lucrative enterprise for a trifle is reduced if the government keeps its stake in the firm.

This point is elaborated more formally in Appendix C. The intuition is illustrated by the example in Table 4. The government wants to sell a car factory. It is known to the government that a potential investor has to rebuild certain run-down sections of the factory and retire old debt. Let the combined total restructuring cost be \$400 million. Suppose only two investors show any interest, and they have different abilities to market the factory's output. Investor 1 expects to produce \$900 million of future discounted dividends from the firm; investor 2 expects only \$600 million. Let both investors be risk neutral. Taking restructuring cost into account, this defines *maximum* bids of \$500 million and \$200 million, respectively. These bids are private information to each investor and unknown by the government. Provided the government definitely sells, in all standard cash auctions investor 1 wins and pays a price equal to (or marginally above) investor 2's willingness to pay.[10] In Table 4 a standard cash auction will see investor 1 marginally outbid investor 2's maximum bid of \$200 million, leaving investor 1 a buyer's rent of \$300 million, and giving the government a revenue of \$200 million.

Table 4. More revenue from participation bids

	Investor		
	1	2	
Restructuring cost	400	400	
Present value of cash flow	900	600	
Cash bid			
Maximum bids	500	200	(value of state capital)
Equilibrium bids	200	200	
Buyer's rent	300		(=500 – 200)
Government revenue	200		
Participation bid			
Maximum bids	5/9	1/3	(share ceded to government)
Equilibrium bids	1/3	1/3	
Buyer's rent	200		(=(5/9 – 1/3) × 900)
Government revenue	300		

[10] This holds for a Dutch auction, an English auction, a first-price sealed-bid auction, or a second-price auction (McAfee and McMillan, 1987; Wolfstetter, 1996). With risk-averse bidders, the English auction yields a higher expected revenue than the second-price auction. Maskin (1992) evaluates different types of cash auction for privatization in CEE countries. Auction theory tells us that the auctioneer may increase the expected revenue above the second winner's bid by setting a reservation price (McAfee and McMillan, 1987). However, this requires that the auctioneer is able to commit to keep the asset if the highest bid is below the reservation price, which is very questionable in eastern Europe's privatization programmes.

Now suppose the government conducts an auction via a participation contract in which the winning bidder must contribute \$400 million of restructuring investment; bids are for the the proportion of future dividends ceded to the government. Investor 2's maximum bid is one-third, since two-thirds of its expected future dividends (\$600 million) equal the necessary restructuring investment of \$400 million. To outbid investor 2, investor 1 must cede marginally more than one-third of future dividends to the government. The government receives one-third of \$900 million, which is \$300 million, and investor 1's rent is only \$200 million (two-thirds of \$900 million, less \$400 million).

Government revenue is \$200 million in the cash auction, but \$300 million in the participation auction. The latter enables the host country to participate in the winner's future dividends. A cash auction means joining the loser; a participation auction means joining the winner. The host country gains by choosing a participation auction. The result is an application of a fundamental result in auction theory first proved by Hansen (1985).[11] If the seller can infer *ex post* the purchaser's valuation of the asset, the seller is always better off if bids are made in terms of this valuation. The participation method makes use of this wisdom.

The magnitude of the excess revenue generated by the participation contract will depend on the ratio of the present values of dividends as expected by the best and second-best bidders. This ratio may be close to 1 if there are a number of similar foreign direct investors who compete. In this case, the two kinds of auctions are equivalent. However, when the bidders are very different, as will be the case when a foreign direct investor competes with domestic investors, the ratio may be much larger than 1, and so a large gain can be expected from using the participation auction instead of a cash auction.[12] The participation makes better use of the family silver and thereby overcomes some of the political resentment against FDI.

8. CAVEATS, PROBLEMS AND PROBLEM SOLUTIONS

While the participation auction has fundamental advantages over a cash auction, it is of course not fully robust with regard to all kinds of problem.

8.1. Transfer pricing

The participation contract works best when information asymmetries diminish over time. In the example of Table 4, implicitly the government was able to monitor *ex post* the surplus extracted by the foreign investor. When surplus is extracted only via

[11] See also McAfee and McMillan (1986), Crémer (1987), Samuelson (1987) and Riley (1988).

[12] Note that with asymmetric bidders the revenue equivalence of cash auctions breaks down: the first-price sealed-bid auction can yield both higher and lower revenues than a second-price auction or an English auction (McAfee and McMillan, 1987).

dividends, this may be reasonable; but surpluses can also be extracted via 'costs' whose value is artificially inflated in ways that the host finds difficult to monitor. One example is transfer pricing. A foreign parent company having a joint venture with a CEE country may supply the joint venture with overpriced intermediate goods and thus repatriate profits without the host country's participation. Both Volkswagen's subsidiary in the Czech Republic (Skoda) and Fiat's subsidiary in Poland (Polski Fiat) have been accused of overpricing automobile parts delivered by the parent companies.[13]

This is a serious problem, well known in the literature on international tax arbitrage. The fear of receiving a bad reputation is a potential safeguard against transfer pricing, but it would certainly be better to implement western-style auditing and control systems combined with sufficiently strong rights of the minority shareholder to prevent fraudulent acts. The arm's-length principle, which requires the payment of market prices for trade flows between the parent and its subsidiary, should be used as a yardstick.[14] To date, few CEE countries have legislated the arm's-length principle (OECD, 1995).

Even where the arm's-length principle cannot yet be implemented, the participation contract retains important virtues. One relates to the government's incentive to exploit the firm with a confiscatory tax system once the investment is made.[15] This incentive mirrors the investor's incentive to exploit the host country's shareholders, but unlike the latter, it is weaker the larger the host country's participation rate. Clearly the participation of shareholders from the host country is a safeguard against exploitation, since these shareholders would use their voice and electoral power to tame their government.[16] (See section 9 for further analysis of the tax problem.)

Another virtue results from the possibility of capitalizing the dividend loss from false transfer pricing. To demonstrate, suppose the two highest bidders have the same possibility of extracting a certain fraction of the firm's profits by overpricing the parts they deliver. If both contracting parties know this, the equilibrium will be characterized by correspondingly higher participation rates for the government, and the discounted value of revenues will not be affected.[17] Even if the fractions of profits which the two bidders can shift differ, there will be no problem provided the government anticipates these fractions correctly and selects the bidder which promises the highest returns. Only unknown abilities to use transfer pricing tricks create a problem. This is the issue of selection efficiency, which we discuss next.

[13] See, e.g., *Business Central Europe*, February 1995, pp. 52–4.

[14] Distorted trade and investment decisions through profit-shifting activities are described in Kant (1995) and Weichenrieder (1996). Not all profit-shifting activities can be ruled out by auditing and control mechanisms: in monopolistic markets, output decisions can serve as profit-shifting devices. See Keen (1991) or Weichenrieder (1995).

[15] This is the hold-up problem studied by Eaton and Gersovitz (1983) and Bond and Samuelson (1989).

[16] For a related argument in an asymmetric information framework, see Konrad (1996).

[17] See Appendix C.

8.2. Selection efficiency

Another important consideration for the evaluation of auctions is the extent to which they ensure that the most efficient investor is picked. In the auction settings so far discussed, the most efficient investor will in fact win. Adding further real-world problems may destroy this property, with repercussions for expected privatization revenues. In general, it is unclear whether cash auctions or participation auctions enjoy a higher selection efficiency.

However, if investors exhibit different degrees of risk aversion or differ primarily with regard to the credit constraints they face, the participation contract will dominate. Credit constraints are a severe problem for the transition countries, whose capital markets have not yet matured. In the presence of credit constraints, a cash auction will pick the most liquid bidder, not typically the bidder with the most promising restructuring plan.

The Treuhand privatizations in East Germany demonstrated this very clearly. While the old managements of the communist firms often had the best ideas and the necessary knowledge of local conditions to rescue their firms, it was typically liquid western investors which made the deal. All too often these investors bought the firms for extremely low prices, aiming at no more than selling the assets and closing the firms.

It would be dangerous for the transition countries to adopt the Treuhand policy: they would deprive competent domestic bidders of a fair chance of taking over the assets to be privatized, and forgo the chance of generating substantial privatization revenues.

8.3. Investment incentives

Do participation auctions inhibit investors' incentives to contribute capital to the firm, since the host country participates in the returns on this capital? The answer is no. Neither the initial capital contribution of the foreign investor nor any future investment financed from retained earnings creates a problem. The initial capital contribution is part of the deal, and the host country participates in the investment financed with retained earnings in proportion to its participation in the dividends thereby generated. The latter is particularly important in the light of the fact that a firm's equity capital is normally generated by profit retentions. It is a fundamental virtue of a joint stock company that the majority shareholder's financial and real investment decisions are independent of the existence of a minority shareholder.

In principle, one could dream up alternatives to the participation contract where the government receives future payments contingent on particular events: for example, profits exceeding a certain threshold level. However, such schemes would typically distort the majority shareholder's investment decision, since the proportion at which the government contributes to the investment differs from the proportion at which it participates in the return. The participation contract avoids this problem.

A difficulty may arise if future investment is financed with new equity injections. If this equity is provided by the foreign investor, the latter should receive more shares in the firm, but it is unclear how these shares should be evaluated. If the shares happen to be sold at their 'true' intrinsic value, there is no distortion in the investment decision. However, the incentive to invest is too strong or too weak if the investor pays too little or too much for the shares. The difficulty can be avoided, though, if all owners receive new share entitlements. The host country can either use its entitlements and contribute capital according to its participatory share, or sell them at a competitive price to its partner or to outsiders. In either case, the incentive to invest is undistorted.

It may not be sensible to make a commitment to future equity injections by the investor part of the initial deal, as was done when VW joined Skoda. Promises of future equity injections lack credibility and are hard to enforce. The outside investor may have an incentive not to keep these promises if the investment turns out to be less profitable than foreseen. Initial equity injections which are part of the deal and future equity injections via share entitlements are better alternatives.

The above discussion suggests that there are few problems with investment incentives as long as these investments are made in terms of physical capital. A more serious incentive problem may arise if the investment takes the form of the investor's know-how. In this case, the foreign investor must be allowed to ask for a reasonable compensation. Within multinational corporations, licence fees and royalties are a standard, albeit imperfect, way of coping with this problem.

8.4. Bargaining about more complicated contracts

Our discussion thus far has assumed a formal competitive bidding process. Such a formal process will often be difficult to implement, since the government's decision will depend on more aspects of the deal than the participation rate. For example, the government may have employment or environmental objectives to balance against the objective of maximizing revenues. It seems to us that the participation contract is preferable to cash sales even under such circumstances. If the government wants a cash price, the foreign investor has an incentive to hide the firm's true opportunities in order to receive a better price. However, if the government insists on keeping a stake, the investor has an incentive to reveal its knowledge about investment opportunities. More than that, it is in its interest to exaggerate the firm's opportunities to convince the government that high future profits justify a somewhat smaller government stake. Given that it is probably more difficult for the government to reinvent the investor's business plan than to check a too optimistic one, the insistence on a participation stake seems to put the government in a more favourable position.

9. PARTICIPATION VERSUS TAXATION

While cash sales remain an unattractive method of combining direct investment with privatization, the participation model is not the only way to overcome the political resentment. A policy of selling assets at favourable prices and taxing their returns may appear an attractive alternative. Withholding taxes on repatriated profits seems particularly well suited to compensating the disadvantages of a fire sale privatization.

In economic terms, a policy of giving away state-owned assets and charging a withholding tax is very similar to the participation model. The government contributes its own assets and participates in the dividends, just as with the participation model. The similarity between dividend taxation and holding a silent partnership has often been discussed in the literature, and it once induced the Meade Committee (1978) to propose a dividend tax as the only tax on company profits, arguing that most other ways of taxing company profits would create larger distortions.

At first sight the tax-cum-give-away strategy even seems superior to the participation model when international double taxation agreements are taken into account. Often these agreements allow the investor to subtract foreign withholding taxes from its own tax claim at home. A CEE government can exploit this situation by charging a dividend tax at, or slightly below, the host country's profit tax rate without fear of diminishing investors' enthusiasm or consequent privatization revenue.

Table 5 gives an overview of the double taxation agreements between the CEE and CIS countries and five important investor countries. With the exception of Austria and some countries in which German and Canadian investors are engaged, the credit method clearly dominates the existing double taxation agreements.

Contrary to first appearances, however, the double taxation agreements do not really lend support to a cash privatization strategy. There are a number of reasons why this is so. The first is that the EU forbids withholding taxes for its members.[18] For all those countries wanting to become members in the foreseeable future, the possibility of participating permanently in the profits of the privatized assets by imposing withholding taxes does not exist.

Second, the gain from the imposition of withholding taxes is constrained by the fact that the residence country does not credit any excess of foreign taxes over its own tax claims. Thus the crediting possibilities will typically be exhausted independently of the privatization strategy. Tax credits therefore do not imply a dominance of cash sales over the participation model.[19]

[18] See Directive 90/435 EEC (Parent–Subsidiary Directive).

[19] Welfens (1994, p. 158) suggests a capital gains tax to reduce investors' windfall profits which can be caused by privatization. Note, however, that a capital gains tax is a residence-based tax. It therefore cannot be applied to foreign investors.

Table 5. The treatment of repatriated profits from CEE countries

	Source				
Host	Austria	Germany[a]	Canada	UK	USA
Armenia[b]	exemption	tax credit	tax credit	tax credit	tax credit
Azerbaijan[b]	exemption	tax credit	tax credit	tax credit	tax credit
Bulgaria	exemption	exemption	tax credit	tax credit	tax credit
Belarus[b]	exemption	tax credit	tax credit	tax credit	tax credit
Croatia	exemption	exemption	tax credit	tax credit	tax credit
Czech Republic	exemption	exemption	exemption	tax credit	tax credit
Estonia	exemption	tax credit	tax credit	tax credit	tax credit
Georgia[b]	exemption	tax credit	tax credit	tax credit	tax credit
Hungary	exemption	exemption	exemption	tax credit	tax credit
Kazakhstan[b]	exemption	tax credit	tax credit	tax credit	tax credit
Kyrgyzstan[b]	exemption	tax credit	tax credit	tax credit	tax credit
Latvia	exemption	tax credit	exemption	tax credit	tax credit
Lithuania	exemption	tax credit	tax credit	tax credit	tax credit
Macedonia	exemption	tax credit	tax credit	tax credit	tax credit
Moldova[b]	exemption	tax credit	tax credit	tax credit	tax credit
Poland	exemption	exemption	exemption	tax credit	tax credit
Romania	exemption	exemption	exemption	tax credit	tax credit
Russia[b]	exemption	tax credit	tax credit	tax credit	tax credit
Slovak Republic	exemption	exemption	exemption	tax credit	tax credit
Slovenia	exemption	exemption	tax credit	tax credit	tax credit
Tajikistan[b]	exemption	tax credit	tax credit	tax credit	tax credit
Turkmenistan[b]	exemption	tax credit	tax credit	tax credit	tax credit
Ukraine[b]	exemption	exemption	tax credit	tax credit	tax credit
Uzbekistan[b]	exemption	tax credit	tax credit	tax credit	tax credit

[a]In general, German double taxation treaties exempt dividends received from foreign incorporated subsidiaries. The reason why the double taxation treaty with the former USSR deviates from this norm is that Germans could not participate in Soviet corporations at the time the treaty was signed.
[b]The republics of the CIS will continue to be bound by the former USSR as long as new treaties are not in force. Estonia, Latvia and Lithuania do not consider themselves bound by former Soviet treaties. (See International Bureau for Fiscal Documentation, *Central and Eastern European Tax Reports*, 30 March 1992.) Austria, Belgium, Denmark, Finland, France, Germany, India, Japan, the Netherlands, Switzerland and the UK have announced that they will continue to respect existing agreements with the USSR. Germany and the Ukraine, however, concluded a new treaty on 3 July 1995 which overrides the old agreement.
Sources: Bilateral tax treaties, OECD (1991), *BMF-Schreiben*, 4 January 1993; Korn and Debatin (1982–95); national German tax law.

Third, a withholding tax would have to be the same for all investors, regardless of how much capital they contributed and how much they gained from receiving state assets at fire sale prices. As the tax rate cannot be tailored to the individual investor, it has to be low enough to make the worst of the investment projects profitable. It follows that it is unable to generate a revenue comparable to the participation contract, which is tailored to each individual situation.

Fourth, dividend taxes suffer from the lack of a credible commitment by the government, and are thus an unattractive alternative for the investors. The government can always raise these taxes in future. In contrast, an individual joint venture contract would typically be protected by the new constitutions of the reforming countries. The participating share in a joint venture contract cannot be altered as easily as a tax rate. It provides greater security for the investor.

10. LEARNING FROM THE CHINESE EXPERIENCE?

Participation contracts of various kinds have frequently been used in China. As early as 1979, China opened its borders to FDI. Still committed to the principles of socialism, a complete takeover of existing state-owned firms by foreigners was ideologically unacceptable to the Chinese government. However, joint ventures with existing firms were allowed, and wholly owned foreign enterprises have been feasible in the form of greenfield investment (Zhang and Thoburn, 1995); takeovers of Chinese firms have been possible only since 1995.

Various studies have discussed the problems facing the Chinese joint ventures, and at first sight these seem to raise doubts about the usefulness of participation contracts. Among other things, Chinese partners were blamed for showing short-term attitudes, incompatible with sound and stable development of the firms (Thoburn *et al.*, 1990). These attitudes may have resulted from socialist ideology, which saw FDI as a temporary compromise on the long road towards a communist society. Ideology may also have been a reason why joint ventures were required to have a finite life. Before 1990 the duration of joint venture contracts was typically no more than 15 to 30 years; today the average duration is about 50 years. Another problem is related to the multitude of goals that Chinese partners imposed on the joint ventures. Apart from trying to import foreign capital and know-how, there has always been pressure on foreign firms to earn foreign exchange by way of exporting goods to other countries. Numerous examples show that tedious renegotiations were necessary if the performance of a joint venture did not meet the government's expectations with respect to the transfer of know-how and the earning of foreign currency.

Despite these problems, Chinese joint ventures have been a success story. A survey of 50 Hong Kong investments in China indicates that the success of investment does not vary systematically between joint ventures and firms that are wholly owned by foreigners (Thoburn *et al.*, 1990), and a study by Luo (1996) shows that joint ventures even perform better: the average return on equity of Chinese joint ventures is roughly 25% higher than that of wholly owned foreign firms.

The Chinese joint ventures have turned out to be a useful vehicle for FDI. In all likelihood, they would have performed even better had the participation contract discussed in this paper been used. Unlike the Chinese joint venture contract, the participation contract establishes a clear responsibility for the western investor and it is of unlimited duration. This should help avoid tedious renegotiations about external company goals and raise the incentives to consider long-term investment.

11. CONCLUSIONS: WHERE THE PARTICIPATION CONTRACT SHOULD BE APPLIED

CEE countries have shown surprising resentment against FDI, some of which reflects the justified fear that foreigners participate in cash privatization in overly favourable conditions, concentrating on speculative purchases of existing firms rather than greenfield investment. Much of the concern with direct investment can be overcome by using the participation model that we propose. It avoids the family silver problem, leaves more funds for genuine investment, and generates higher privatization revenue. It is superior to voucher privatization because it helps to establish a dominant shareholder, thus resolving the problem of corporate governance.

It would have been ideal if the participation model had been used in earlier stages of the privatization process. Today, a significant fraction of the privatization task has already been completed. This is particularly true in the Czech Republic, Estonia, Slovenia, Hungary and Moldova. However, there are many countries where privatization has yet to go far, and there are a few countries where virtually nothing has been achieved. The latter group comprises Azerbaijan, Kazakhstan, Turkmenistan and the Ukraine. The former includes Albania, Armenia, Belarus, Bulgaria, Georgia, Kyrgyzstan, Latvia, Lithuania, the Slovak Republic, Romania and, most prominently, Poland and Russia. In Poland and Russia, aversion to selling existing assets to foreigners has been particularly strong. These two countries could be the primary focus for a reconsideration of FDI. The participation model, by increasing the scale of FDI, may open the door to more successful development.

The participation model does not have to be confined to the first step of the privatization process. Since this model describes a joint venture with a foreign investor in which the existing assets are kept in the hands of the host country, it may also be suited to a second privatization step where the new private share owners invite a foreign partner to manage their firm. The partner would receive shares in exchange for new capital and know-how. Representatives of the existing private owners, whether the management or a private investment fund, could act like the privatization agency. They could invite restructuring bids and select the best partner according to the rules described in this paper.

Countries like the Czech Republic and Romania, which have used the voucher method, could now switch to the participation model to solve the problems of weak corporate governance and shortage of capital which still exist after privatization. The same is true of the Russian firms whose shares largely went to the workers. Worker co-operatives cannot really be considered a feasible and efficient method of organizing the industrial production process. It would be in the interest of existing workers to attract foreign investors to manage their firms. The participation model could be a way to achieve this end without having to sacrifice the newly acquired private wealth. Perhaps the participation model will turn out to be a complement to, rather than a substitute for, existing privatization methods.

It is essential for the upswing in CEE countries to become faster and stronger. FDI is an important tool for achieving this goal because it brings both money and expertise into the transition economies. To date, FDI has been disappointingly low, perhaps because it too often involved cash purchases of existing assets. We hope that the participation contract will be a better vehicle for direct investment and for boosting the economies of the CEE countries.

Discussion

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Institutional innovations are much needed to help solve the problems of our time. Economists are not too good at that. All too often, they restrict themselves to praising the virtues of the market, advocating its introduction without carefully stipulating either the institutional background required or the political consequences to be expected. In several countries of central and eastern Europe (CEE), economists had a chance to propose to the governments concerned a transition process from planning to the market. The outcomes are not very encouraging.

A major reason for the unsatisfactory transformation process is the lack of new institutions that could support the market, not least in the authors' own country. In Germany, the 'unification' of the west and the east has been undertaken by imposing western institutions, one by one, on the east. Even institutions known to be functioning badly, and therefore already heavily criticized, were simply transposed to the east. Social security and the university system are cases in point. No room was given to establish new forms of organization (e.g. to privatize), and even variations within the public sector were practically excluded. A huge opportunity was missed. German economists failed to challenge the establishment's conservatism, the efforts of Hans-Werner and Gerlinda Sinn (1991) being a notable and commendable exception.

I am grateful to Lorenz Götte for his helpful remarks.

Sinn and Weichenrieder's institutional invention – the participation contract – is thus a welcome and important addition to the transformation literature.[20] Here, I raise some issues, hoping that this will help further to improve their proposal.

Why does foreign investment induce political resentment?

The authors' approach assumes existing foreign investment led to resentment that in turn favoured communist (or at least anti-market) parties, thereby hindering economic development. In view of the central importance of this causal relationship, it is surprising that no empirical evidence is brought forward and that the existing literature on the political economy of foreign direct investment (FDI) is not exploited to find such evidence. A large number of scholars have undertaken careful econometric analyses of the determinants of FDI, paying particular attention to political instability and political risk as a restricting factor.[21] More recently, the econometric work relating democracy and growth (e.g. Knack and Keefer, 1995; Barro, 1996) provides a mine of pertinent empirical evidence.

The authors discuss several reasons why FDI might lead to political resentment. I want to discuss three of them. First, foreign investors, in particular the Germans, were *enemies* in the Second World War, and the population still resents their intrusion. Maybe so, but this claim has to be buttressed by strong empirical evidence for the individual countries in question. The proposition is certainly not true in general. Consider the relationship between Germany and France, which in the last 130 years has been characterized by three wars, and the First World War in particular has cost a sea of blood. Yet there is little resentment about German investments in France; if anything, investments by Americans, allies of France in the two world wars, are resented more. The history-based view of resentment is even more strongly rejected by the relationship between the USA and Vietnam. Those of us who lived through their long, bitter and bloody war are flabbergasted by what we see today: Americans are heartily invited to invest in Vietnam (and the school-children are seen waving US flags).

Second, the most important reason for the political resentment produced by FDI is identified by the authors as *property rights*. As no such transfer takes place in the case of greenfield investments, the authors find the latter to be much less problematic.[22] Let us call this notion the *ownership hypothesis*, to which, unfortunately, the authors do not adduce any empirical evidence. Rather, they state it as a matter of obvious truth. But there is quite another view which clearly differs. The *control*

[20] It has a historical root in the German economic literature on co-determination and co-ownership. Several authors (e.g. Bombach, 1969, 1981) have suggested that the workers should get a larger share in productive capital in exchange for wage restraint.

[21] An early survey is Agarwal (1980); much work has been undertaken by Dunning (1974, 1981) and Kobrin (1976, 1982). See also Schneider and Frey (1985) and Frey (1984, ch. 4).

[22] But still, as Sinn and Weichenrieder acknowledge, it is hardly observed in CEE countries.

hypothesis suggests that formal ownership is largely irrelevant: what produces resentment is the control of the firms' policies by foreigners. What matters is not what firms are, but what they do. Do they dismiss workers, do they favour foreign managers, is the business language used foreign? As we will see, the difference between the 'ownership' and the 'control' hypotheses has important consequences for the participation contract and offers an obvious explanation for the low volume of greenfield investment.

A third reason why FDI in existing firms creates political trouble according to Sinn and Weichenrieder is that there exists a fundamental *information asymmetry* between the foreigners and the locals. As a result, *too low* a price is paid for the firms. Foreign investors know the firms' value better than the national privatization agencies. This statement may be true, but it is somewhat surprising. Normally, one would think that the locals constitute the better-informed insiders, and the foreigners, who are the less-informed outsiders, then tend on average to pay *too high* (and not too low) a price. There is evidence that locals know the value of their property quite well, and perhaps tend systematically to overestimate it. The endowment effect has been well supported in experimental and real-life settings (e.g. Dawes, 1988; Thaler, 1992).[23]

In any case, the authors do not provide any empirical evidence on their 'too-low-price' theory. If they were correct, we should observe correspondingly high rates of return on investment in eastern European countries. I thought that the opposite was true and that this is the reason why there is no flood of FDI to these countries. Of course, if the foreigners are better able to provide the management capabilities to run a firm successfully, it is perfectly correct that the firm is valued more highly by the foreigners than by the locals. But why should the locals not be aware of this difference in management capability which they cannot muster themselves, and why should they therefore resent a change in property rights?

The participation contract

The authors seem to have in mind that the locals should have some residual ownership, but no important control. Would the local government be prepared to enter such an agreement? Even if the deal takes place, how is *resentment* affected? Absence of voting rights may induce considerable resentment. Suppose instead the nationals *have* voting rights (shares), but the participation contract still forbids them any control of the firm. In that case, two problems emerge. The first is a continuous danger that, on the basis of their voting rights, the locals will intervene when their interests are strongly threatened (e.g., when local employment is reduced). Even if

[23] Readers who have tried to buy a weekend or holiday home in the countryside (e.g., Tuscany) may have accumulated circumstantial evidence on the tendency of locals to overestimate the value of their property. The notion that the locals do not know the value of their houses and antiques refers to the good old days, not to today.

the shares belong to private persons, political influence by the government is likely, directly or indirectly. Second, if foreign investors are able *fully* to control the firms' policies, as seems required by the participation contract, the 'control hypothesis' will come true: resentment and political resistance are created because the locals have no say.

Conclusions

The authors have not sufficiently established why a participation contract should really be able to keep out local interference, and if so, why political resentment should be any less than under present arrangements. Why should purely formal ownership – without any right to intervene – make any difference? Even so, the idea of a participation contract seems much superior to me compared to privatization and foreign investment programmes which simply disregard the institutional and political basis of markets. To improve the proposal, existing knowledge on the relationship between economics and politics with respect to investment and growth could be profitably used.

One fruitful avenue is to build on the authors' own view that greenfield investment meets with less political resentment. The land could be contributed by the local government in exchange for (voting) shares in the firm to be established in the greenfield. As this land value is normally only small compared to the foreign investment inflow, it might be possible to form a participation contract that leaves sufficient room for foreign management to restructure the firm, and at the same time significantly reduces political resentment.

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In general, I very much like the 'participation contract' idea proposed in the paper. But a few words of caution are needed.

First of all, participation contracts do not yield any immediate government revenue. The authors mention that poor infrastructure, inadequate policing, etc. are major factors slowing down economic growth in eastern Europe. A cash sell-off would give governments immediate resources to fund improved services, resources that might be difficult or costly to obtain elsewhere.

Concerning the theoretical argument in favour of participation contracts as a device for extracting bidders' rents (Appendix C), an important underlying assumption is that there is no uncertainty about the value (opportunity cost) of bidders' inputs. By its very nature, the restructuring capital and know-how to be provided by the foreign investor are hard to measure and evaluate: if not, the government could arrange for these inputs to be provided contractually on its own account. Consider now the situation of two competing foreign investors A and B whose (unobservable) input is worth \$200 and \$400 respectively in its best alternative use; while under their management the firm will be worth \$1200 and \$1400 respectively. In a conventional auction of the whole firm for cash, both will bid \$1000 and the government extracts all rent. In a participation auction, the bidders' reservation shares are (\$200/\$1200=)1/6 and (\$400/\$1400=)2/7, respectively. In an open-bid auction, accordingly, bidder A will win and obtain a 2/7 stake in the firm. The firm is worth \$1200, so the government's stake of 5/7 is worth \$857.

In this example, the participation contract yields lower revenue than a conventional cash sale. Thus, if there is a substantial degree of uncertainty about the value of foreign investors' expertise and restructuring input, the winning bidders may well be low-quality investors who are prepared to accept a low stake in the firm, but who are incapable of enhancing its value adequately. In such circumstances a cash auction might work better; and in general, a participation auction should be complemented by stringent guarantees concerning the level of inputs to be provided by the foreign investor.

Concerning risk premia, it is argued in Appendix B that the proposed participation contracts optimally extract such premia for the government because private investors' equity stake is minimized. But here it is implicitly assumed that the government's cash input into the process is exactly zero. The foreign equity stake can be reduced even further, at will, if the government is willing to recapitalize the company by injecting cash: in that case, points along *KC* to the left of *D* can be reached in Figure A1, and risk premia conceded to the private investors are reduced even further. But more realistically, if the shadow cost of public funds is high or if the government itself is risk averse (a reasonable assumption, given that the firm's risk is likely to be highly correlated with economy-wide risk), then the government's objective is not necessarily to reach the lowest possible point on locus *KC*. Instead, its indifference curves would not be flat but upward sloping, and the optimum might lie anywhere on *KC*, possibly even to the right of point *D*. In that case the government might demand from the foreign investor a cash payment in addition to its proposed restructuring inputs into the firm, and award it a commensurately higher stake in the firm.

Summarizing, the implicit assumption that the government neither contributes nor takes out cash during the auctioning process has the virtue of simplicity, but it is not compelling.

As a final comment, in evaluating the degree to which the slow pace of foreign investment was driven by demand or supply, it would be interesting to see how profitable such investments have been to date. Analysis of such data, when they become available, will give important insights into this issue.

General discussion

Axel Weber thought that, while the level of foreign direct investment in eastern Europe seemed low, a proper assessment could be made only by relating these flows to the level of total investment in these countries. Similarly, when evaluating the costs and benefits of FDI, some data on levels of profit repatriation would have been useful. Torben Andersen thought that the low levels of FDI should be seen against the backdrop of a recession in Europe: it is not altogether surprising that FDI is strongly procyclical.

Barry Eichengreen was sceptical of the view that resentment was the factor responsible for poor levels of foreign direct investment in eastern Europe. In his opinion, the big deterrents to FDI were the inadequate infrastructure and the poor policies in these countries. If anything, all the anecdotal evidence offered in the paper was consistent with the latter constraints. While one could survey the residents of these countries to look for resentment, he felt that any resentment to FDI was rooted not so much in fear of 'losing the family silver', but more in suspicion of the perceived market power of the large foreign corporations. If so, the real solution was to use effective competition policy to regulate this power. Further, he did not believe that the average rate of return was a useful guide in situations where investment is front-loaded and the return comes later on.

Willem Buiter objected to the authors' interpretation that the scheme outlined in the participation model did not involve the sale of assets. If managerial control is transferred in the process of creating a joint venture – and one could see that transfer of control was probably critical to the restructuring exercise – ownership is effectively transferred. It was wrong to claim that the firm is not sold when the foreign partner acquires both control and a share of profits, and the government is reduced to being a silent partner. Of course, if the family silver has to be sold, one must enquire if a well-designed auction could realize a better price. Charles Bean thought that the literature on mechanism design might offer precisely such alternatives. The auction of radio wave bands in the USA was a case in point: the auction authorities had used repeated sealed-bid auctions, with the proviso that the procedure could be terminated at any time. A comparison of these alternative schemes was called for.

Alan Kirman argued that the idea of factor price equalization – that trade equalizes the relative returns to factors even in the absence of factor mobility – was not relevant to this model. He noted that the auctions described in the model were unlikely to be common value auctions because, typically, different investors would put different valuations on the assets. Also, the specific recommendation of the participation model – that the firm be managed by the foreign partner – was contrary to the situation in eastern Europe, where a lot of firms, including most of the new ones in Russia, are labour managed.

The risk-sharing properties of the participation model were discussed. Dani Rodrik pointed out that, in the presence of limited liability, profit sharing may end up attracting frivolous or especially risk-prone investors. Patrick Rey added to this, noting that rather than 'joining the winners', the government might end up joining the riskier firms. Torben Andersen wondered if the government was the natural partner from the viewpoint of risk sharing. Surely, given the access that the foreign firm has to international capital markets, it would be better to diversify its risk in those markets. Participation of the domestic government may then be useful primarily for its signalling value. Importantly, the model had considered optimal auctions for a given set of projects and investors. It was well known, from principal–agent theory, that one cannot take the investors and set of projects as given, independently of the type of contract offered.

Some other problems with the participation model were also identified. István Székely raised the possibility that profit-sharing agreements may be manipulated through transfer pricing, especially if a substantial proportion of the inputs of the joint venture is imported from the parent company of the foreign partner. Willem Buiter noted the possibility of the government taxing the profits on foreign-held shares, and the associated problem of time consistency. Kevin Chang pointed out, by means of a simple numerical example, that whenever the foreign investor gets less than 100% of the return on the investment, the marginal incentive to invest will be lower in a profit-sharing arrangement than otherwise. This would surely reduce the volume of FDI flows.

Vidar Christiansen did not see the point of the recommendation that shares in the joint venture should be given to the domestic population rather than sold to them. He considered the shares to be a source of revenue for the government and, as such, an alternative to distortionary taxation. He also felt that the authors had overstated the rigidity of the tax system in these countries.

Patrick Rey felt that some fairly standard objections could be raised against the scheme outlined in the model. For instance, the Chicago viewpoint would suggest that it does not matter how you privatize, as long as there is a free market in shares after privatization. Similarly, instead of the government setting up a joint venture, one could consider alternative schemes whereby the shares are first distributed to the domestic public, and then the public seeks partnership with foreign investors. He thought that questions of this sort, and other aspects of political economy, had not been addressed. Hans-Werner Sinn pointed out that the participation model had been used successfully in Bolivia.

APPENDIX A. FAMILY SILVER AND XENOPHOBIA – SOME ANECDOTAL EVIDENCE

Date	Description of evidence	Source
Bulgaria		
9/95	Bill Coletti, executive director of the American Chamber of Commerce in Bulgaria: 'there's not a long line of "Fortune 500" companies contemplating investment in Bulgaria, because they put every possible obstacle in the way'.	*CEER*, 9/95
1995	Because of bureaucratic hurdles, Britain's Rover Group needs four years to complete a $6 million acquisition of a state-owned factory.	*CEER*, 9/95

Czech Republic

1992–4	Czech government's 'family silver' policy requires that strong and viable enterprises be kept in domestic ownership.	*Privatisation Newsletter*, 28, 11/94
1/94	Prime minister Vazlav Klaus: the Czech Republic has too much foreign investment; he would prefer foreigners to hold back until privatization is finished. *Central European Economic Review* reports growing public scepticism about foreign investment.	*CEER*, summer 1994
5/94	Miroslav Nevosad, general director of the state-owned refinery Kaucuk, argues foreign investors are more loyal to their home offices than to the Czech Republic. He names the plan to restructure Czech refineries without foreign help the 'Czech way'.	*WSJE*, 9/5/94
10/94	VW plan to scale down employment at Skoda and cut future investment raises Czech anger. Minister of industry and trade, Vladimir Dlouhy, argues that Volkswagen has violated the spirit of the contract.	*FT*, 24/10/94
1994	Czech airline CSA withdraws from the strategic alliance with Air France, Czech government paid $27 million to buy out French stake. CSA now seeking a domestic investor.	*FT*, 24/11/94
12/94	Foreign banks and contractors interrupt common project ($200 million) to develop Prague airport because of disputes with the government over financial conditions. The foreigners are replaced by locals.	*Economist*, 25/3/95
1/95	The government tries to attract US investment to balance strong German investment.	*FT*, 9/1/95
1995	Negotiating the privatization of Czech refineries, the government demands that the possible investor (IOC) promises not to increase its stake to over 50%.	*Economist*, 25/3/95

Estonia

1994	Estonian public starts to demand more shares in privatization after realizing that 40% of assets have been sold to foreigners (Treuhand policy).	*BCE*, 6/94

Hungary

1992	With 80% of privatization revenues coming from abroad, nationalist politicians, media and local businessmen claim disposal of state-owned companies at 'fire sale prices'.	*BCE*, 11/1/93
1993	Many foreign bids were turned down in favour of lower bids from domestic management. Privatization revenue coming from abroad was reduced to 50%.	*BCE*, 4/94
1994	*Wall Street Journal Europe* reports 'growing public disenchantment' with the foreigner-dominated privatization process.	*WSJE*, 19/4/94
10/94	After a lengthy tendering process with three foreign bidders interested in 'HungarHotels', and after agreeing to sell the hotel to a US investor, the Hungarian government withdraws from the negotiations, arguing that bids were too low.	*FT*, 16/10/94, 16/1/95

Poland

1991–4	Government declares tobacco a 'strategic sector', rejects bids by foreign investors. *Business Central Europe* suspects that 'anti-foreign sentiment is clearly at play in keeping tobacco companies in state hands'.	*BCE*, 2/95
2/92	Privatization minister Tomasz Gruszecki says that former governments gave too much preference to foreigners; new projects would have to benefit Polish citizens.	Hunya (1992)
1994	Polish trade union Solidarity views efforts to restructure Fiat Auto Poland's workforce as trying to introduce a 'slave system'.	*BCE*, 2/94
1994	Privatization of some 'strategic' state industries like refining, telecommunications and electric power has been held up because of fear of foreign dominance.	*CEER*, summer 94
1994	Bogdan Pek, Peasants' Party deputy and head of Sejm privatization committee: mass privatization is selling the country out to less-than-professional foreigners.	*BCE*, 10/94

1994	Polish trade unions stir up anti-foreign sentiments, fearing sell-off of 'family silver'.	*SZ*, 25/11/94
1994	Poland tries to attract English investors so as not to become too dependent on Germany.	*FT*, 10/11/94
9/94	Prime minister Pawlak defers sale of 105 firms; questions needed to be answered as to why so many companies were situated near the German border.	*BCE*, 10/94
1991–5	During the last five years restructuring of the petroleum sector is said to have been held up by 'sometimes-xenophobic political squabbles'.	*CEER*, 9/95
1995	Prime minister Pawlak declares after his resignation that he had done his utmost to prevent foreign investors taking over Polish companies.	*HDB*, 2/2/96
Russia		
1994	Western firms are still restricted in share purchases: 51% to workers, 29% public offer.	*BCE*, 4/94
1994	Investors complain of aggressive mood against foreigners. Articles in local press claim foreigners 'robbing Russia, exploiting workers, sending the money out of the country'.	*BCE*, 4/94
1994	Deep-seated xenophobia is said to express itself in a host of contradictory regulations doing 'anything but welcoming investors'.	*CEER*, summer 94
1/95	Wladimir Polewnow, head of State Property Agency, claims second wave of privatization should be accompanied by nationalization; national security must be guaranteed.	*FAZ*, 20/1/95
5/95	Oxford Analytica reports proposals to create a Russian reinsurance company seem meant to recapitalize the sector without increasing the foreign companies' access to the market.	*Oxford Analytica Daily Brief*, 10/5/95
Slovak Republic		
1994	Marian Huska, vice president of the Movement for a Democratic Slovakia (HZDS), promises that, if returned to government, HZDS will 'correct' privatization. HZDS is 'pro foreign investment [but] in terms of development rather than purchase'.	*Economist*, 13/8/94
6/95	HZDS-led government stops second wave of voucher privatization and excludes many enterprises from privatization because of their 'national importance'.	*SZ*, 14/7/95
Slovenia		
1994	'Many people are afraid that rich Germans will come here and buy everything', says Mira Puc, managing director of the Agency for Privatization. 'And it's true – if they have enough money they can buy what they want and we don't have the power to stop them.'	*CEER*, autumn 94

Abbreviations: BCE: Business Central Europe; CEER: Central Eastern Economic Review; FAZ: Frankfurter Allgemeine Zeitung; FT: Financial Times; HDB: Hilfe Daily Briefing; SZ: Süddeutsche Zeitung; WSJE: Wall Street Journal Europe.

APPENDIX B. EARNING A RISK PREMIUM

Let K be the investor's wealth if uncommitted, I its given restructuring investment and q the fraction of dividends it claims. Thus, it offers a valuation $X = I \times q/(1-q)$ for the existing assets. Let P be a cash price the investor pays to the privatization agency and suppose the investment generates a present value of random dividends π whose expectation is $\mu(\pi)$ and standard deviation is $\sigma(\pi)$. The investor's wealth distribution Y after deciding on the project has mean $\mu(Y) = K - I - P + q\mu(\pi)$ and standard deviation $\sigma(Y) = q\sigma(\pi)$. Together these define (μ, σ) combinations satisfying the *participation line* (see Figure A1).

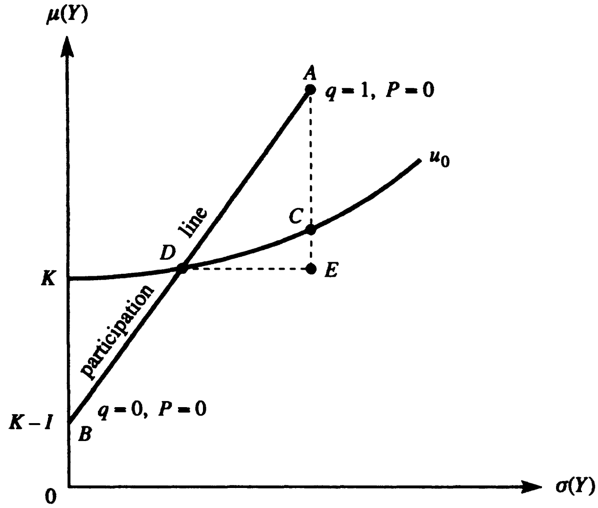

Figure A1. Privatization revenues and risk-averse investors

If $q = 1$ and $P = 0$, the investor gets all returns, the government gets nothing. The investor's wealth distribution is given by point A. If $q = 0$ and $P = 0$, the government receives all returns and the investor nothing, although it pays for the restructuring investment. The investor's wealth distribution now is given by point B. Intermediate participatory solutions with $0 < q < 1$ are points on the participation line. If the investor receives all returns but pays a cash price P, its wealth distribution will be given by a point vertically below A, where the distance between this point and point A gives the magnitude of the price. The cash price reduces the expected wealth, but leaves the risk unaffected.

Suppose identical bidders compete for a privatization project. Competition will induce them to make bids that reduce their utility to the level they would attain without participating. In Figure A1 this means that a point on the indifference curve u_0 – the curve originating at a wealth level K on the ordinate – will be reached. Under the participation contract, the winning bid will be given by a level of q that brings the investor to point D on the participation line. The government's expected present value of dividends equals the distance between points A and E.

In a cash auction, the winning bid would instead be given by point C. The government's revenue would only be AC. Obviously the government can, in addition, earn (or avoid paying) the risk premium CE if the participation model is used. The risk premium is positive if the investors are risk averse, because then the indifference curve u_0 is upward sloping.[24]

[24] In this consideration the restructuring investment I has been taken as given. It can be shown that the participation model will also generate a higher investment volume if this volume is part of the investor's choice and the government picks the investor which it expects will generate the higher present value of dividends in the future. See Demougin and Sinn (1994).

APPENDIX C. JOINING THE WINNER

This appendix shows that a participation contract extracts more of the winning bidder's rent. Abstract from risk aversion and consider a class of investors which differ in know-how and in the present value of total dividends, π, which they can generate given the necessary investment I. Each investor knows its own π; neither the government nor other investors know this. Let π_1 and π_2, $\pi_1 > \pi_2 > I$, be the present value of dividends generated by the best and second-best investor, respectively.

Consider a cash auction. Let P_1 and P_2 be the maximum cash prices the two investors are willing to pay for the existing assets. Clearly

$$P_i = \pi_i - I, \qquad i = 1, 2 \tag{C1}$$

The maximum willingness to pay equals the present value of the cash flow the restructuring investment can generate. Investor 1 wins the bid and pays an expected price equal to (or marginally above) investor 2's willingness to pay. Thus investor 1 will enjoy an auction rent R_1 given by

$$R_1^{Cash} = P_1 - P_2 = \pi_1 - \pi_2 \tag{C2}$$

and the government will collect a privatization revenue G equal to

$$G^{Cash} = P_2 = \pi_2 - I \tag{C3}$$

Next consider an auction under the participation contract. Let X_1 and X_2 be the maximum valuations for the existing state assets which investors 1 and 2 are willing to offer, and let q_1 and q_2 be the respective minimum relative participation rates claimed by these investors. By the definition of the participation rate,

$$q_i \equiv \frac{I}{I + X_i}, \qquad i = 1, 2 \tag{C4}$$

Bids are in terms of X_i or equivalently in terms of q_i. Analogously to equation (C1),

$$X_i = \pi_i - I, \qquad i = 1, 2 \tag{C5}$$

Equations (C4) and (C5) imply that

$$q_i = \frac{I}{\pi_i}, \qquad i = 1, 2 \tag{C6}$$

Asking for bids in terms of q of X implies that investor 1 wins, but has to bid only marginally higher than investor 2's valuation. The winner's auction rent is therefore $R_1^{Part.} = (q_2 - q_1)\pi_1$, which, after a few rearrangements using equation (C6), can be written as

$$R_I^{Part.} = (\pi_1 - \pi_2)\frac{I}{\pi_2} \tag{C7}$$

A comparison with equation (C2) reveals that $R_1^{Part.} < R_1^{Cash}$ if, as assumed, $\pi_2 > I$: that is, if it is strictly profitable to restructure the firm. Obviously, the participation contract enables the government to reduce the winner's auction rent.

The present value of dividends that the government is able to collect with the participation contract should therefore be higher than the potential cash revenue. The present value of the government's dividends equals the share that the second-best bidder is willing to cede to the government times the best bidder's dividend value:

$$G^{Part.} = (1 - q_2)\pi_1 \tag{C8}$$

To interpret this expression, use equation (C6) to write equation (C3) in the form

$$G^{Cash} = (1 - q_2)\pi_2 \tag{C9}$$

and combine equations (C8) and (C9):

$$G^{Part.} = G^{Cash}\frac{\pi_1}{\pi_2} \tag{C10}$$

Equations (C8) and (C9) show that the participation contract dominates the cash sales contract. Equation (C10) shows that the magnitude of the gain will depend on the ratio of the present values of dividends as expected by the best and the second-best bidders.

Note that, in principle, this result can still be attained if investors can shift a considerable part $g < 1$ of the eastern firm's profits by using transfer pricing tricks. The maximum bid is implicitly given by

$$I = q_i(1 - \gamma)\pi_i + \gamma\pi_i \longrightarrow q_i = \frac{I - \gamma\pi_i}{\pi_i(1 - \gamma)} \tag{C11}$$

The larger g, the larger the future profit-shifting possibilities. Equation (C11) indicates that this will also increase the investors' maximum bids. The government's discounted revenue is now $(1 - q_2)(1 - \gamma)\pi_1$. Combining equations (C6), (C9) and (C11) shows that this revenue is the same as in equation (C10).

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