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PARTICIPATION, CAPITALIZATION AND PRIVATIZATION
Report on Bolivia's Current Political Privatization Debate

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Abstract

While most privatization plans involve cash sales, Bolivia's new government, constrained by its constitution, is planning to use an altenative method which it calls "Capitalization Plan". The capitalization plan meeans that new investors are sought who contribute fresh capital to the existing firms and receive a fractional ownership in exchange, the retained fraction being transferred to the people of Bolivia. The present paper discusses merits and drawbacks of such a plan, comparing it with traditional methods.

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1. INTRODUCTION

President–elect Gonzales Sanchez de Lozada has declared that participation will be a major theme of his government. He has announced the creation of a separate "Ministry for Popular Participation".

Participation means two things:

i) More participation by the Bolivian people and local communities in the government's decisions; constant awareness of the preferences and needs of the people.

ii) More direct participation by the Bolivian people in the ownership assets that are currently state owned.

While the government places equal weight on both of these alternatives, this report confines its attention to item ii).

The means of achieving more participation by the Bolivian people in the state owned assets is a privatization method that lies between the British cash sales method and the Czech voucher privatization method. In the latter case shares in the existing state enterprises are given to the population. No new capital and no new management are introduced. In the former case, the government assets are sold to competent new owners who are better able to take over the management function. With the cash sales method no ownership participation by the Bolivian people is possible. The intermediate possibility preferred by the new Bolivian government is a participation method where joint ventures between outside investors and the Bolivian people are created. This method is similar to that discussed for East Germany's privatization by Sinn and Sinn (1992).

With the participation method, the outside investor contributes know–how and fresh capital to the state enterprise. In exchange he receives a fractional ownership in this enterprise that reflects the value of his inputs. The government, in turn, retains a fractional ownership that reflects its contribution in terms of the existing assets of the enterprise to be privatized. The retained shares are then given to the Bolivian people in a way yet to be specified (see below).

While the traditional cash privatization method emphasizes the transfer of ownership of a given set of assets, the participation method emphasizes the search for fresh capital to be brought into the enterprise. The Bolivian government has therefore also used the name "capitalization" to describe its preferred privatization method.

This report gives an overview of the relevant arguments and problems. Section 2 compares the cash sales and the participation contracts. Section 3 focusses on the bidding procedure under the participation contract. Section 4 discusses the question of which Bolivian enterprises should be privatized. Section 5 compares alternative methods for distributing the government's retained shares. Section 6 offers some conclusions and tries to evaluate the Bolivian government's proposals.

2. CASH SALES VS. PARTICIPATION METHOD

2.1. *A Hidden Form of Borrowing*

Privatization via cash sales creates windfall gains which are an immediate relief for the government budget and which significantly reduce the need for fiscal discipline. Unless the unlikely event that the sales revenue is used for paying back the government debt occurs, cash privatization ignites a Keynesian fiscal straw fire.

In fact, cash sales are a hidden form of government borrowing. They enable more current government consumption at the expense of future generations. The government's net wealth declines and funds are withdrawn from the capital market.

In contrast, privatization via the participation contract is no hidden borrowing. It does not allow the government to cash in on the shares and it respects the preferences of future generations of Bolivians.

2.2. *More Value for the Bolivian People and more Jobs*

The Bolivian people have two kinds of legitimate interest in the privatization of the state owned assets. First they want the privatization to bring in new foreign capital so as to create jobs and raise the marginal product of their labor and thus their wages. Second, they want to maximize their wealth or income from their implicit or explicit ownership in the state owned assets. There are reasons to believe that in both of these dimensions, the participation contract will dominate the cash sales contract.

2.2.1. *No Participation without Capitalization*

With the cash sales method, an investor can buy part or all of an existing cash flow that is generated by the assets that are already available. Accountants may call this direct investment, but all too often no real investment is involved. With the participation contract a private investor will receive returns only if, and only to the extent that, he contributes additional capital to the firm. This is a strong incentive for capitalizing the Bolivian firms.

It is of course tempting for a government to undermine the rules of the participation contract and channel funds into its own pockets rather than those of the firm. "Flexibility" is a word used by economic advisors that may sound good to the ears of finance ministers. However, the Bolivian government has committed itself to keeping strictly to the path of virtue. This commitment will turn out to be one of the conditions for the ultimate success of the program.

2.2.2. *More Interest by Credit–constrained and Risk–averse Investors*

Under the cash sales method the investor could also carry out real investment in addition to buying the firm. However, his available funds may already be exhausted by paying the price of the firm. Credit constrained buyers will not be able to pay as much cash for the firm as an investor under the participation contract is willing to cede to the government in terms of the present value of dividends from the retained shares. They will also find it difficult to match the volume of investment chosen under the participation contract.

A similar remark applies to risk averse investors. The participation contract can be interpreted as a cash sales contract where the government returns the revenue to the firm in the form of equity capital. Since this equity capital bears part of the company's risk, the private investor will find a real investment less hazardous and will both risk a higher amount of capital investment and cede more funds (in terms of expected present values) to the government than he would do under the cash sales method.

In a sense, the participation contract can also be interpreted as a sales contract where the dividends ceded to the government are a particular form of payment tailored to the needs of the investor. On the one hand, the payment occurs later than with the cash sales contract. This helps credit constrained investors. On the other hand, the payment is due only if, and to the extent that, distributable profits are being made. This helps investors who are risk averse.

It is true that there may be huge international companies for whom neither of these aspects is of considerable importance. However, there may also be smaller investors who are qualified and who do care about these matters. One of the advantages of the participation model is that it widens the range of potential investors to take in middle sized firms from all parts of the world including Latin America and even Bolivia itself. This widening of the range enhances the likelihood of finding a qualified investor, tends to increase the resulting investment volume, and can be expected to increase the wealth retained for the Bolivian people.

2.2.3. *Full Investment Incentives despite the Partnership*

It might be feared that the government's fractional claim on dividends reduces not only the private investor's risk, but also his incentive to invest in the creation of dividends. After all, the investor receives only a fraction of these dividends. Fortunately, this fear is not justified.

First, the government will be prepared to honor any increase in the initial amount of capital investment with a reduction in its fractional ownership so as to make it possible for the investor to capture the full marginal returns that he creates. With a competitive bidding procedure the government will only be able to earn the return promised by competing bidders. The bidder who actually receives the contract will be able to keep any above–normal profit he is able to create through his own investment.

Second, there is every incentive for future investment when this investment is financed with retained earnings. The government contributes to this investment by limiting its dividend claims just as the private investor does. The participation contract establishes a fair partnership that is incentive compatible for both parties involved.

Third, future capital injections by the investor can be matched by the government or, if the government does not want to make use of this option, will be rewarded with a higher fractional ownership of the investor. The parties may also copy the VW–Skoda deal and agree on the future equity contributions by the outside investor when the privatization contract is made. The agreement would specify that the investor's shares are increased pari passu with his equity injections.

2.2.5. *Non–Voting–Shares*

A serious disincentive effect for private investors could be the fact that the representatives of the Bolivian people could use their voting rights to pursue goals other than profit maximization. For example, these representatives could be interested in preserving more jobs than necessary and in preventing rationalization investment.

In order not to scare potential investors away by such considerations, the retained shares should have limited voting rights. The voting rights should be restricted to issues of fundamental reorganization or liquidation that risk depriving the government of its assets. They should not apply to normal investment and employment decisions.

It is a precondition for the restriction of voting rights that the investor brings in enough capital to justify an ownership fraction of at least 50 %. If this condition is not satisfied, special management contracts are to be negotiated in order to protect the outside investor.

2.2.6. *More Protection against Fraud*

Cash privatization opens the door to huge bargaining profits and fraudulent behavior by the buyers. The buyers often have better information than the government, and they can lie about the true profitability of the firm, underrepresenting its true magnitude. While this behavior can never be fully excluded, the participation contract reduces the incentives for it.

On the one hand, there is an ongoing business connection between the investor and the government or whoever the representative of the Bolivian people is. This connection will make it possible to monitor the true profit capacity of the firm and to demand a renegotiation of the contract should a fraudulent behavior be detected.

On the other hand, the goverment's fractional claim on the dividends of the enterprise offers a certain degree of protection. Suppose a purchaser claims that the firm's profitability is low and convinces the government to content itself with a low residual ownership fraction on the grounds that otherwise the rate of return on his capital contribution would be lower than with rivalling investment projects. If, ex post, the investor's rate of return turns out to be higher than claimed, the funds ceded to the government (or its follower in law) will also be higher than the government expected. Obviously, the fractional ownership implies a self–correcting device for an undervaluation of the government's assets.

2.3. *Preserving the Family Silver*

All too often cash privatization means selling or giving away the nation's family silver into foreign hands. The Bolivian constitution therefore forbids this form of privatization for the nation's natural resources.

Under the participation contract no resources are sold or given away to private investors. In principle, the full value of the existing assets can be reserved for the Bolivian people and will, indeed, be distributed to them as explained in section 5.

In fact, the Bolivian people will be holding more wealth than they would without the privatization. Many of the firms that are legitimate candidates for privatization have zero or even negative profits, so the assets would be worthless if nothing happened. With wise private restructuring and widening investment there will be profits, and parts of these profits will accrue to the population. The legitimate interests of the Bolivian people will be more than respected.

3. THE BIDDING PROCEDURE WITH THE PARTICIPATION CONTRACT

3.1. *Defining the Best Bidder*

With the participation contract, the private investors must make a bid in which they specify

i) the capital they are willing to inject

ii) the value they attribute to the existing assets contributed by the Bolivian state

iii) a modernization plan

The information under i) and ii) specifies the fractional ownership of the government and the investor. Together with iii) the government makes an estimate of what present value of dividends can be expected from its fractional ownership. The government choses the investor so as to maximize this present value.

3.2. *Evaluating the Existing Assets*

With the participation contract, the value attributed to the existing assets will be higher than the present value of cash flow that could be expected from these assets if no restructuring investment took place. Wise investors will make more out of the old assets, and in a competitive bidding procedure they will be willing to give some of the increase in value which they induce to the government. Under ideal circumstances, the value attributed to the old assets equals the present value of the cash flow net of the initial restructuring investment that can be generated when this investment is wisely chosen.

It is sometimes argued that this present value should belong to the investor who created it through his actions. However this argument overlooks the nature of the competitive bidding procedure. In order to get the contract, potential investors will be willing to attribute higher and higher values to the government's existing assets, thereby reducing their own fractional ownership claims on the firm's dividends. Eventually, the successful bidder will just be able to reclaim his advantage over the second–best bidder, but when the bidders have similar investment strategies, this may not be much. The government would in this case be able to capture nearly all the rents from a wise investment.

In the light of this consideration it would not make much sense for the Bolivian government to estimate the value of its existing assets on the basis of the cash flow they are currently generating. Such a value could only serve as a lower bound for the negotiations with the investors.

3.3. *Public Bidding*

In order for the bidding procedure to approximate a competitive bidding process a few obvious requirements should be met.

First, the firms to be privatized should be publicly announced so as to maximize the number of serious bidders.

Second, the currently best bid should be made public, and counterbids should be accepted within an extended period of time.

Third, the enterprises should be split into smaller units, large enough to be viable as independent firms. This would increase the number of bidders per unit.

The parliament (or even the public) should be thoroughly informed about the alternative bids so as to maximize the government's incentive to find an objective and correct decision.

3.4. *The 50:50 Rule*

The Bolivian government currently favors an equal division of shares between the private investor and itself or the Bolivian people respectively. This 50:50 rule is somewhat at odds with the participation model because the ownership shares are to be determined by the relative values attributed to the resources contributed by the two parties. There is no reason to believe that an optimal amount of restructuring investment would just imply equal shares. Unfortunately the government seems to have committed itself to equal shares or at least to not allowing more than 50 % foreign ownership in Bolivian firms.

In principle, the problem could be remedied by demanding that the investor contribute 50 % of the value and invest any surplus capital in the capital market or make up any missing capital by borrowing. However, the surplus capital would be risk bearing and would thus render the enterprise less attractive for the investor, and borrowing may be an expensive method of providing the missing capital.

The government is advised to relax the 50:50 rule so as to maximize the interest of potential investors. One way of doing this would be to apply the rule to an average of all privatized firms rather than each single firm. The mutual fund model described in section 5.2. would be a good vehicle for such an interpretation. To satisfy potential government commitments it should be sufficient to ensure that the value of the mutual fund is at least 50 % of the aggregate value of the private capital contributions.

4. WHICH FIRMS ?

4.1. *The Candidates*

The candidates under consideration for privatization according to the participation model are

i) YPFB (petrol)

ii) ENDE (electricity)

iii) ENTEL (telecom)

iv) ENFE (railway)

v) ENAF (smelter)

vi) COMIBOL (mines)

vii) Aero Lloyd Boliviano (airline)

Only YPFB, ENDE and ENTEL are currently profitable. ENFE, ENAF and Aero Lloyd are currently making losses; COMIBOL is bankrupt.

4.2. *Efficiency Considerations*

It is not clear whether all of the firms should be privatized from an efficiency perspective. Some may be natural monopolies with decreasing marginal costs or at least marginal costs falling short of average costs in the relevant range.

If a distortion free tax system is available, prices of such firms should be equal to marginal costs, implying that operative losses will occur. Operative losses are a necessary condition for efficient supply, though, of course, not a sufficient condition. The losses are to be covered by the tax revenue.

If, as is the case in Bolivia, only distorting taxes are available, price should be slightly above marginal cost, but operating losses are, in all likelihood, still necessary for efficiency.

If no taxes are available, the natural monopolies taken together cannot be allowed to make losses. Ramsey prices are appropriate in this case and in general there are profits for some enterprises that are taken to balance the losses from others.

The privatization of natural monopolies violates all of these efficiency rules. It will typically make the firms profitable, but at the expense of excessively high prices. These prices will scare away too many consumers and are thus undesirable from a welfare point of view.

It is sometimes argued that the deficiencies of private natural monopolies can be overcome by an efficient regulation. However, such a regulation is difficult, to say the least. Price ceilings are no solution, because efficient prices would result in operating losses. And unit subsidies are not advisable because they are likely more expensive for the government than running the firm itself and covering the operating losses from other sources. Taking efficient countermeasures against the monopolist's tendency to restrain output and increase prices just is not easy. The necessary regulations are so complicated and require the government to have such a large monitoring capacity that a privatization may not be an attractive solution.

4.3. *Evaluating the Candidates*

Judged by the above criteria, there is no doubt that YPFB, ENAF, COMIBOL, and Aero Lloyd Bolivanos should be privatized. In all cases the supply is directed towards a large market with many suppliers.

In the case of ENDE the power stations may be privatized but not the network. A precondition is that sufficient country–wide connections exist to allow for competititon between the power stations. Local power stations that do not face competition because they are not connected to an interregional network should not be privatized. The control should be left to local authorities.

The local telecommunications network cannot meaningfully be privatized, because parallel networks would result in higher aggregate costs. However, with long distance calls privatization may be possible. The relevant test is that a few companies can be convinced to buy chunks of ENTEL. Inviting only one company to operate in Bolivia because other solutions would be too expensive is not advisable. A government–run ENTEL with improved internal efficiency might be better than such a form of privatization. After all, the know–how of the telecommunications business can be bought separately. It is not necessary to introduce a private monopoly in order to acquire this know–how.

Similar remarks finally apply to ENFE. Privatizing the railway network is very inefficient as US and Canadian examples show. The European national railway systems perform significantly better than the American private ones. If anything, the carriers themselves could be privatized but even this would seem somewhat problematic in the light of the enormous economies of scale in the operation.

5. DISTRIBUTING THE RETAINED SHARES

5.1. *The Alternatives*

There are at least five ways of distributing the shares retained by the government with the participation contracts:

- Distributing the individual shares to all adult Bolivians.
- Collecting the shares in a mutual fund (or more than one fund) and distributing shares in this fund to the adult population.
- Distributing the shares to the workers of the firms privatized.
- Using the shares to refurbish and extend the social old age pension system.
- Financing social works (FUNDESOL).

This section briefly compares these alternatives.

5.2. *Individual Shares vs. Mutual Funds*

There are 3.2. million adult Bolivians. The distribution of individual shares of all the different enterprises to each adult is hardly possible, since the value per share would be negligible. Paying dividends on these shares would involve prohibitive transactions costs. The problem could be avoided by not giving all shares to all adults. But this would involve a difficult selection problem. Some shares would be valuable, others not. There would be a substantial asset risk for the individual Bolivian.

A solution for this problem is collecting the retained shares in a nation wide mutual fund which in turn then issues shares in itself to the Bolivian adult population. This way, each Bolivian adult would effectively hold a well diversified portfolio, and nevertheless the transactions costs for distributing the dividends would not be prohibitive. It has been estimated that the participation method would double the income of most Bolivians.

If there are implicit regional ownerships in the firms to be privatized, regional mutual funds could be established instead of one nation wide fund. The diversification of risks would however be suboptimal with this solution.

A big advantage of any distribution of shares, be it individual company or mutual fund shares, is the flexibility it gives to private investors. Individuals who want to start a small enterprise of their own or who want to invest in an existing enterprise can get the funds needed by liquidating the shares. In view of the need to develop an efficient small scale business sector in Bolivia, the advantages of this flexibility should not be underestimated.

5.3. *Buying the Workers' Agreement*

Instead of distributing the shares equally among all adult Bolivians, a preferential treatment of the workers of the privatized enterprises could be considered. If these workers received some of the shares of "their" respective firms, they might be more willing to accept the necessary lay–offs and other disadvantages that may be connected with privatization. Also the work morale of those kept employed and, in particular, their restraint in future wage negotiations might be enhanced.

The disadvantage of this method is that there is no risk diversification and that the population not working in privatized enterprises is neglected. The share distribution to workers can only be used as a partial supplement to a wider distribution plan.

5.4. *A Pension System for Bolivia*

Refurbishing the old age pension system by means of the shares retained is an attractive solution in the light of the inability of the current system to meet its obligations. However, the current system covers only 12 % of the population. The participation method gives the chance of extending the old age pension system to 100 % of the population. Three basic alternatives are available, and of course hybrid solutions are also possible.

i) The dividends on the government shares are distributed to the currently older generation, and each consecutive generation of old people participates in a similar way without ever having contributed to the system.

ii) The dividends and the proceeds from liquidating the shares are used to finance the pensions of the currently old. The currently young generation contributes to the pension system and accumulates assets which will later be liquidated to pay for its pensions. In a sense, the shares are given to the currently old generation which then sells them to the currently young generation against this generation's contributions to the system. The retained shares are used to enable the otherwise difficult setting up of a funded social security system.

iii) The currently old generation receives the liquidated share value plus the contributions to the system coming from the currently young. The shares are used for an abrupt start for a pay–as–you–go social insurance system.

Alternative i) is feasible, but it lacks incentives for further capital formation. In a growing economy the old age pensions will be eroded relative to labor incomes. Alternative ii) is a sound system with ongoing individual incentives for an increase in the capital stock funding the system. However, it is subject to internal political erosion and rent seeking. Since the contributions of the young will turn out to be sufficient to finance the pensions of the old, governments will be tempted to liquidate the (seemingly useless) stock of assets and make gifts to the current and future generations of retirees which extend the pensions beyond the normal value planned at the introduction of the system. Alternative ii) therefore may converge to alternative iii). In fact, this conversion has historically occurred in many cases. Many countries had once introduced funded social security systems, but nearly all of these systems have been eroded with the passage of time. Even the Swiss system which nominally is said to be a funded system and which is considered to be the most solid one in the world has been downgraded to a pay–as–you–go system.

A limited protection against this development would be a constitutional clause that forbids the old age pension system ever to sell the assets received through the privatization policy. Here, too, a funded social insurance system with increasing accumulation of capital would not develop. However, at least the gradual erosion of the existing stock would be prevented. In effect, the system would be a combination of system i) and a pure pay–as–you–go system.

A better protective device would be keeping the pension system strictly private. Admittedly it would be difficult to keep the government's hands off a nation wide obligatory pension system. Also, of course, a privately managed pension system would not be safe from private abuse, as the American savings and loan crisis showed. However, a private solution with strict government control may be the preferable alternative for the Bolivian people.

The details of such a system would have to be worked out carefully. It should definitely cover most of the population including the large fraction of self–employed campesinos. It should be ongoing and safe from erosion after the beneficiaries of the initial share distribution are dead. And it should allow for a maximum of flexibility in using the available funds for personal investment purposes.

5.5. *Furbishing FUNDESOL*

The final alternative for using the shares is to keep them with the government and to use the dividends for financing public works. In the past, government financed matching grants channelled through FUNDESOL have been a successful means of helping the local communities. The local communities have to make proposals for public goods production and FUNDESOL finances a certain proportion of the expenditure. The system could be extended with the dividends from the shares. However this solution effectively means that the shares stay national property and that the dividends help financing the government budget.

Before the privatization the profits collected by the government were about 4 % of GDP. They stemmed primarily from YPFB. Since privatization is expected to increase the overall profit distributions accruing to the government, the FUNDESOL solution seems rather extreme. There is little justification for tying such a large flow of funds to just one particular public program. Moreover, of course, the Bolivian people's participation in the shares retained would be a rather indirect one.

6. CONCLUDING REMARKS

The participation program of the Bolivian government is a promising and daring attempt to initiate a major economic and political upsurge in the country. The economic part of the participation program which was discussed in this report is likely to achieve major economic goals including a more equal distribution of wealth among the Bolivian people and a capitalization of the economy that may be the basis for an economic upswing.

So far not all decisions about the program have been made, and many details will still have to be worked out. The most urgent policy decisions include

- the exact terms of the competitive bids expected by the investors, distinguished by industries and firms;
- the definition of privatizable assets in each sector such as the explorable claims in the oil industry, the breakdown of larger conglomerates, or the scope of private control over the telecommunication or railway business;
- thorough definitions of the mutual fund and/or pension fund solutions discussed;
- the specification of the tax system under which the investors will have to operate.

A tax reform is urgently necessary, for without such a reform, the privatization policy might not be credible. Every prudent investor will take into account the fact that the government's loss of the YPFB profits will have to be compensated by tax increases and he may be afraid that these tax increases will diminish the profitability of his investment. The Bolivian government should make it clear which taxes it wants to raise so as to provide the investors with the necessary planning security. The recently introduced value–added tax is a good candidate for a rate increase. Since this tax exempts investment it will not affect the success of the privatization plan.

In the somewhat longer run, Bolivia needs a more fundamental tax reform to significantly increase the tax share in GDP. The share is currently only 10 % which is an exceptionally low figure even for the Latin American countries. Without a major tax reform it will not be possible to overcome the significant deficiencies of the public sector. Bolivia needs better public infrastructure and a better civil service with well–paid, reliable "servants of the state". Not enough weight has been given in the current program to the fact that a well functioning market economy requires a well functioning government sector. Privatization is not everything.

A final remark applies to the publicity Bolivia should seek in the international investor's community. The country does offer prosperous investment opportunities, and it should make this information public. A goodwill and advertising campaign in the international media is strongly advisable. Bolivia should not content itself with approaching a few big international investors. The participation scheme it offers has been tailored to the needs of medium size firms whose risk bearing and funding capacities are limited. Such firms may do a good job for the country, even though they may not be the most widely known firms existing.

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