The Privatization Process: A Natural Order Or Shock Therapy?

Mary M. Cutler, (cutler@ccsu.edu), Central Connecticut State University

Abstract

McKinnon (1991) argues that there is a natural order of economic liberalization and privatization. Sachs (1990) and Becker (1995) argue that the value of speed is so important it outweighs the value of waiting to discover the optimal sequence. This paper investigates the question of order as it specifically applies to privatization of the industrial and financial sectors. Empirical evidence indicates that, while order is important, simultaneous change provides the necessary order. In this case, there is, in fact, no conflict between the "natural order" case and the "shock therapy" argument. A "quick leap", the simultaneous privatization of the industrial and financial sectors, provides the necessary order.

Introduction

As Eastern Europe and Russia change their political and economic systems, some countries are selling state-owned industries without the support of either functioning capital markets or private financial institutions. While many investors consider a market-driven financial sector a necessary support for a private industrial sector, others argue that a marketized financial sector is a difficult step in the liberalization process and privatization is imperative, even if not under optimal conditions. This paper is an attempt to answer the question: Is conventional wisdom wrong, or are we observing a "rush to privatization"?

Extensive interest in privatization motivates our study. Much of the recent literature focuses on the dramatic changes in Eastern Europe

and Russia where privatization is ongoing and critically important to economic recovery. The political breakup of the Soviet Union and simultaneous transition to market economics creates a virtual laboratory for design of privatization programs.

Economic efficiency is the ultimate objective of these programs but political acceptance and speed are critical to success. Boycko et al (1994) argue politics, rather than economic benefits, influenced Eastern European governments to choose mass (free) privatization rather than conventional privatization. Studies by Blanchard et al (1991), Frydman and Rapaczynski (1991), Lipton and Sachs (1990) and Bolton and Rolland (1993) argue the merits of each of these. All of these researchers evaluate program design using four economic efficiency objectives: elimination of political control and subsidies, allocation to efficient users, establishment of governance mechanisms and speed.

Readers with comments or questions are encouraged to contact the authors via e-mail.

The question of speed is our particular focus. Academics and practitioners alike debate the merits and risks of the "Big Bang" approach versus a slower, and more orderly, transition. Much of the debate assumes that "order" and "speed" are mutually exclusive. Our study focuses on two specific, important steps in the privatization process and we find that order and speed can co-exist if the financial sector is privatized early in the process.

We look specifically at the effect of the financial sector on industrial privatization programs and find, as expected, that the existence of private financial intermediaries, i.e., privatized banks, may, indeed, be a necessary condition. Policy makers cannot arbitrarily choose the sequence of privatization, as regards the opening of economic sectors; there is a "natural order". Policy makers, who try to avoid political "pain" by privatizing industrial firms without facing the angst that generally accompanies financial privatization, are only postponing pain.

The 1980's saw a worldwide trend toward privatization, government sale of state-owned enterprises, by both developed and developing countries (Ramamurti 1992). This trend is expected to continue, particularly in Eastern Europe and Russia, despite the mixed results of recent programs. In some of these countries there are strong private banks while, in others, governments own and run the banking system. There are those that argue that state-owned financial institutions can coexist with private banks in a competitive setting, if state-owned institutions are autonomous and profit-maximizers (Yarrow 1986). Considering the unlikelihood of governments' granting autonomy to bank managers, this argument converges with Moore's (1992) view that state-owned financial institutions must be sold to accomplish financial reform.

On the other hand, if governments privatize the financial sector first, potentially higher market interest rates could result in political backlash. Economic distress and instability, which may accompany the increased interest rates, threaten political careers. Thus, policy makers

face the proverbial "chicken or egg" question: Industrial privatization, without marketized financial institutions, is unlikely to succeed, yet privatization of the financial sector incurs serious political risk.

The paper begins by presenting both cases: the argument for a slow and orderly transition and the case for a "quick leap". We then look at the role of the financial sector in an economy. The third section describes our methodology and the fourth section presents empirical evidence. The final section is a summary and conclusion.

I. The Natural Order versus Shock Therapy

McKinnon (1991) argues that there is a natural order of economic liberalization. He makes the case that stability and success require a particular sequence of fiscal and monetary measures to decontrol prices and privatize property. On the other hand, Jeffrey Sachs (1990), economic advisor to a number of privatizing governments, from Argentina through Eastern Europe to Russia, advocates a "leap to a market economy", pointing to the record of failures if change is implemented on a piecemeal basis. Gary Becker (1995) explains that the value of speed is so great it outweighs the value of "waiting to discover the right sequence of reforms." Becker notes that neither history nor economic theory provides much guidance on the correct order and, considering the high political and economic cost of unsuccessful economic transition, he argues for speedy, even simultaneous reforms. Shock therapy privatizes large parts of the economy quickly (Koslowski, 1992).

We believe these two, apparently conflicting, arguments can be reconciled; our results indicate that order is important and, also, that rapid reform provides the necessary ordering. Becker's advice to "move fast" and McKinnon's "natural order" arguments are not in conflict. The appropriate issue, as we will see further in this paper, is the risk inherent in use of an *incorrect* order.

We hope our study will focus the discussion on the real issue, the need for a privatized financial sector to support privatization of the industrial sector of an economy.

II. The Role of the Financial Sector

Financial markets and financial intermediaries play different roles in developed economies. In general, however, both markets and intermediaries provide the essential functions of consolidation of investment funds, oversight of management and portfolio diversification. Hayek (1945) argues further that market-provided information, concerning risk premiums and time value of money, is necessary for efficient economic allocation of resources.

We must also consider different functions of markets and intermediaries: Markets are able to react quickly in terms of price and risk while intermediaries are better positioned to monitor managements. However, in the real world, economies often function with only one or the other, many times quite satisfactorily. In particular, Aggarwal (1995) notes that financial markets can be important alternatives to financial intermediaries in privatizing economies. However, financial markets don't exist or are fairly illiquid in developing countries; thus financial intermediaries may have to serve as alternatives to financial markets. In this case, banks and financial institutions would provide information on interest rates.

Function of Financial Markets

Interest rates reflect the time value of money, which varies with each individual and can be described as the individual's Marginal Rate of Substitution (MRS). In other words, each person evaluates the benefits of consumption today against consumption in the future. This relationship is mathematically described as shown in Equation 1 below (Copeland & Weston, 1988, p. 6 & 117):

$$MRS^C_{O_C I} = -(1 + r_i) \quad (1)$$

where,

r_i = subjective rate of time preference for individual.

Irving Fisher (1930) explained the role of capital markets, noting that "the marginal degrees of impatience for all individuals in the market are brought into equality with each other". In the equilibrating process, markets convert individuals' subjective rates to an *objective* rate:

$$MRS = -(1 + r_m) \quad (2)$$

where,

r_m = market-determined objective rate.

Benefits of Capital Markets

An important result of Fisher's work is the demonstration that market-driven interest rates, which drive *optimization* models, improve the welfare of all individuals in an economy (consumers, savers and investors). In Fisher's famed Separation Theorem, individuals *optimize* consumption by borrowing or lending until r_i equals r_m , and investors *optimize* investment decisions through use of *objective* market interest rates (Copeland & Weston, 1988, p.12).

Significant additional benefits of capital markets have been identified since Fisher's work in the 30's. For example, Alan Greenspan, in an address to Eastern European central bankers, pointed out that capital markets provide savers with the ability to diversify portfolios and reduce risk. When investors require lower risk premiums, capital costs are reduced, encouraging investment and employment.

Role of Financial Intermediaries in Privatizing Economies

Financial intermediaries, e.g., banks, generally provide firms with ongoing, day to day credit sources to support operations. Without ac-

cess to credit, a new firm's value as an ongoing enterprise and revenue generator may be jeopardized. Firms without credit may have less value to potential buyers, incur higher capital costs, and face uncertain futures.

The credit allocation process, however, requires local currency interest rates and risk premiums, information generally provided by a capital market. In developed capital markets, stock and bond exchanges provide this information on a number of large currencies. In less developed market economies, private financial intermediaries, e.g., banks, provide a market for local currencies and, thus, the necessary information on interest rates and risk premiums. Alternatively, in non-market economies, government planners set interest rates for their own currency.

Currency-specific Interest Rates

In recent years the world's capital markets have expanded and globalized. Much has been written about this phenomenon but the literature generally overlooks the currency-specific nature of interest rates and risk premiums. The currency-specific nature of interest rates explains the lack of a world interest rate. Individuals' time-value preferences are unique to each currency. On an intuitive level, we realize that our demand for next year's Deutschemarks is very different from our demand for next year's pesos. As a result, supply of funds (from savers) and demand for funds (by investors and consumers) are currency specific and determine interest rates. These market-driven currency-specific interest rates are a *necessary*, but not sufficient, *condition* for successful privatization.

Interdependency

In summary, financial intermediaries and financial markets are interdependent. Intermediaries need information from financial markets; financial markets need to be assured that firms have access to credit (a function of financial intermediaries). Both functions are necessary in a privatized economy. However, in developing or transition economies, where capital markets don't yet

exist, both roles can be performed by privatized banks and financial institutions.

III. Study of Relationship of Financial Sector to Privatization

Our hypothesis holds that privatization of the financial sector of an economy is a necessary condition for successful privatization of the industrial sector. To study the relationship we need an objective measure of *success*. While economic welfare measures, pre and post-privatization, would be ideal, such data is not available. We use a simple binary model: a program is deemed a success if it meets the objectives expressed prior to the program.

Objectives of Privatization Programs

The literature on privatization provides a great deal of material on governments' rationale for privatizing firms.

Fiscal Pressures

Privatization of government assets can be a short-term solution to government cash flow problems (Wolf 1987). Governments must subsidize unprofitable SOE's and privatization ends this cash drain. In addition, profitable SOE's are salable and thus a potential source of cash.

External Debt

Governments in need of external financing may find themselves committed to a package of economic reforms which includes privatization. The World Bank, International Monetary Fund and U.S. Agency for International Development include privatization requirements in lending packages (Babai 1988). Ramamurti (1992) finds a significant correlation between a country's external debt and its penchant for privatization.

Efficiency

Performance of SOE's is generally disappointing (Short 1984). Governments around the world are disillusioned by state ownership, the

high cost of inefficiencies and elusiveness of solutions to the problem (Ramamurti 1992). Privatization is attractive; the World Bank provides concrete support for efficiency gains in a study which shows that, in eleven of twelve cases, privatization improved performance and welfare. Annual benefits averaged twenty six percent (Kikeri et al, 1992). Megginson et al, in their extensive 1995 study of operating performance of privatized firms, confirm efficiency findings.

A possible criteria for judging country programs as a success or failure could be achievement of these benefits. If data were available we would have relative measures of success. However, appropriate data is not available and this study does not require relative success measures. A simple measure of "success" or "no success" will suffice in this model. We use governments' subsequent behavior as an indicator of satisfaction. Thus, expansionary behavior indicates that policy makers are satisfied, and, conversely, cancellation or contraction of programs indicates that policy makers are unsatisfied with results.

Status of Financial Sector

As Koslowski (1992) notes, the neoclassical assumption that the institutions of capitalism are natural does not apply to real world economies making the transition from socialism to capitalism. In particular, we cannot assume the immediate birth of capital markets and effective financial intermediaries, the primary communicators of valuation information (Hayek 1945).

The most common financial intermediaries are banks which generally precede organized capital markets. We consider local banks' status, at the time of industrial privatization, as a critical test of our hypothesis.

Sample

We analyze a large proportion (in terms of value) of recent privatizations in this study. Our sample is randomly chosen in that we include all programs for which we found information; we use

no selection criteria and no programs are excluded.

Our sample includes programs from both developed and developing countries, a mix similar to that in Megginson, Nash and VanRandenborgh's (1994) study of effects of privatization on firm performance. (Restricting the study to programs in less-developed markets could bias results and, at the least, cause confusion, as effects could depend on the development stage.)

IV. Empirical Evidence

We look at programs in nine different countries, on four different continents, with financial sectors that vary from total state control to long-established private ownership: Chile, Mexico, Nigeria, Turkey, Poland, Hungary, Czechoslovakia, the United Kingdom and France. Although the resulting sample is too small for meaningful statistical analysis, the results indicate a strong and direct correlation between the status of the financial sector and the success of privatization. Our results highlight the fact that effects of a privatized financial market are *independent* of the stage of development: Expected effects occur in new, undeveloped markets as well as in developed markets, e.g., France and the United Kingdom.

A. Chile

In 1970 Salvador Allende came to power on the promise of a gradual transition from capitalism to socialism. He hoped that his program would, initially, redistribute income and yet allow capitalist owners to make investment decisions (Loveman, 1st ed., 335). Over the next three years, Allende's government: (a.) Nationalized the financial system (banks and insurance companies); (b.) Nationalized key industries, i.e., copper, agriculture, transport, utilities, oil, and communication; and (c.) Developed a "mixed" sector, both public and private, in other parts of the economy, particularly distribution (Oppenheim, 29).

Between 1970 and 1973 Allende nationalized so many industries that the government

produced half of gross domestic product. However, uncertainty, particularly among small businessmen, produced serious problems in the mixed sector (Loveman, 1st ed., 330). Power struggles, between the government, the military, peasants, landowners, workers and managers, along with a recession, destabilized the government.

In 1973 a military coup headed by Pinochet ended the Allende regime and Chile returned to the free-market model, rejecting even tariff barriers and import quotas. The Pinochet government sold off most of the firms nationalized during the Allende regime and gave foreign investors full status (Loveman, 2nd ed., 318). However, world copper prices declined and the Chilean recession continued.

In 1978 copper prices improved and Chile enjoyed an economic boom through 1981. Inflation was subdued, industrial production increased, and the balance of trade was favorable. Conditions improved enough for the junta to dissolve the secret police and intelligence service (Loveman, 2nd ed., 342). During this period the government deregulated the financial system and privatized social security (Loveman, 2nd ed., 338).

In 1981 the "miracle" turned into a nightmare; copper prices reversed course, the peso was devalued and the economy collapsed. Seven of every ten privatized firms failed and these industrial failures brought the banks down. In 1983 Pinochet assumed control of banks and major firms, the very actions for which he had soundly criticized Allende! (Oppenheim, 138)

When the economy recovered, in the mid 80's, the new government "redid" privatization. However, this time they recognized the importance of a private financial sector; in fact they privatized that sector first (Nankani 1988) focusing on banks, insurance companies and pension funds.

The government also changed the rules the second time. Sales were spread over large numbers of investors, both domestic and foreign. No individual investor or group could control more than twenty percent of a firm, although core

share holdings were reserved for strategic investors. Workers got five to ten percent of shares at a discount, half of which was financed by the government, and with a promise that any losses, at the time of their retirement, would be covered by the government (Kikeri et al, 61). Half of the pension fund shares and the insurance companies were sold to foreign private investors. Large investors were screened to ensure their financial and managerial abilities. State ownership in Chile was reduced from thirty nine percent of Gross Domestic Product in 1973 to twelve percent in 1989 and employment increased (Kikeri et al, 59).

Chile experienced economic failure when industrial privatization was not supported by a private financial sector. In the second program, the financial sector was privatized first. This program was deemed satisfactory and expanded.

B. Mexico

Mexico leads the Latin-American privatization trend, netting more than \$20 billion between 1988 and 1992 and including many of the world's biggest single-company public offerings. Mexico regularly expanded privatization in the last two decades as each new program produced satisfactory results.

A study of 62 petrochemical and auto parts firms privatized before 1982 shows: three-year investment increases of as much as 75% of gross sales revenue, upgraded technology, improved financial management, and lower numbers of managers receiving more competitive pay (Kikeri et al, 29).

The Federal government expanded the program in 1984, selling or liquidating four hundred more firms and merging or transferring to municipalities another four hundred (Kikeri et al, 23). As a result of privatization, net government transfers, from 1982 to 1988, were cut in half, saving \$4 billion for the Mexican government (Kikeri, 30). Mexico's satisfaction with these earlier privatizations is demonstrated in the massive privatization that occurred between 1988 and 1991 which included all of Mexico's large banks.

Mexico appears to again be satisfied with results as they recently announced plans for an expansion expected to net \$12 billion for their financially-strapped government (*BusinessWeek*, April 3, 1995, p.66).

C. Nigeria

Nigeria's activities show clear evidence that early privatization of financial institutions was deemed important to the success of privatization programs. Of the first twenty firms privatized in Nigeria, thirteen were insurance companies (financial intermediaries).

New offerings, which totaled only 800 million naira in 1989, increased to three billion naira in 1990 and 1991 (Kikeri et al, p.46) and the government planned to sell sixty more firms in 1993 (Perrotti & Guney 1993). The steady expansion indicates strong satisfaction with results of earlier offerings.

D. Turkey

In Turkey, a mixed economy where SOE's account for four percent of Gross National Product, the operating surplus from these firms has been deteriorating since 1985 and marginal efficiency of SOE capital is only half that of the private sector (Kikeri et al, 15). The Turkish financial sector is dominated by banks, half privately-owned and half state-owned, which engage in the usual commercial banking activities (depository and lending) and also underwrite and trade equity securities. Thus, in Turkey, banks intermediate not only borrowing and lending but also risk-equity investing.

In the 1980's Turkey moved to liberalize their economy, instituting financial reforms and developing markets. Ceilings on interest rates were removed. Foreign exchange barriers were also removed and foreign banks are allowed to compete in the Turkish market. The government, however, is a dominant player and government lending, at noncompetitive rates to favored firms, influences market interest rates. Empirical studies show that state-owned banks in Turkey do not

compete as autonomous firms; interest margins are significantly lower for state-owned banks (Aydogan & Booth 1995).

As expected, privatization efforts have been less than successful. Share prices of two privatized firms declined so much that the government bought them back and investors are wary about participating in future privatizations (Kikeri et al, 63).

E. Eastern Europe

Control of the banking system varies dramatically by country in Eastern Europe. Czechoslovakia sold off half of its banking sector in 1992 but Poland and Hungary are moving more slowly, privatizing only small specialized banks.

The bad debt problem is proving to be a formidable obstacle in Poland and Hungary. Recent estimates indicate that thirty to sixty percent of Polish bank assets and fifteen percent of Hungarian state bank assets are at risk of write-offs. Policy makers realize that a clean up of these problems is necessary for successful privatization but solutions are politically elusive. In fact, state-owned banks continue to generate bad loans because of symbiotic relationships with SOE's (OECD, 71).

Czechoslovakia, setting a high priority on privatization of banks, transferred bad debts to the government and infused capital into the banks before spinning them off to the private sector. The governments of Poland and Hungary, however, continue to wrestle with the problem of bad debts and the banks remain in the government sector.

Initial privatizations in Poland, Hungary and Czechoslovakia were private partial sales of industrial firms to foreign companies (Tables 1, 2, 3).

Foreign companies, with access to credit in their home markets, are able to tolerate the lack of an effective private financial sector. We argue that the number of sales to foreign firms is direct evidence of the need for access to credit. In each

Table 1: Poland

Enterprise	Industry	Date Sold	Stake Sold	Proceeds (Million \$)	Acquirer
HSO Sandomierz	Glass	1990	40%	140	Pilkington
Fampa	Paper	1991	80%	7	Beloit
FMS	Vehicles	1991	51%	800	FIAT
Alima	Food	1991	60%	11.3	Gerber
Wedel	Food	1991	40%	24	Pepsico
Polam	Lighting	1991	51%	NA	Philips
Bydgoszcz	Detergent	1991	80%	20	Unilever

Source: Perrotti and Guney 1993

Table 2: Hungary

Enterprise	Industry	Date Sold	Stake Sold	Proceeds (Million\$)	Acquirer
Hunguard	Glass	1988	80%	120	Guardian
Bistozito	Insurance	1988	49%	80m DM	Allianz
Tungsram	Electrical	1989	50%	150	GE
	Equip.	1991	25%	NA	GE
Raba	Vehicles	1989	NA	150	GM
Ganz-Unslet	Vehicles	1989	51%	4	Telfos
Chinoin	Drugs	1990	40%	75	Sanofi
Dunapak	Paper	1990	40%	82	Prinzhorn
GM Hungary	Vehicles	1990	67%	66	GM
Szabadegyhazi	Food	1990	49%	35	Agrana
Lehel	Appliances	1991	100	65	Electrolux
Compak	Food	1991	51%	60	Sara Lee
Intercsokol	Food	1991	97%	38	Nestle
Magyar Suzuki	Vehicles	1991	40%	30	Suzuki
Csemege	Retail	1991	Majority	35	Meinl
Ikarus	Vehicles	1991	30%	50	Atex
Egri Dohangy	Tobacco	1991	20%	NA	Aus.Tabak
SzolnokSzer.	Sugar	1991	40%	40	Beghin-Say
Komaromi	Beer	1991	50.3	NA	Heineken
Hajdusagi	Sugar	1991	30%	20	Tate&Lyle
Gyori Keksz	Food	1991	84%	NA	UndBiscuit
RevaiObuda	Printing	1991	57%	5	Watmoughs
Allami Biszt	Insurance	1992	75%	50	Aegon

Source: Perrotti & Guney 1993.

of the sales shown above, governments retain significant stakes (Perrotti & Guney 1993). Using the signaling hypothesis we could assume that these governments retain partial ownership because they subscribe to the efficiency argument (values would increase under private management). Interestingly, when these governments

later sold other firms to local investors they did not retain ownership. So, the efficiency argument is not the key parameter; we suggest that access to capital may be the critical factor in the governments' decisions about retention of some ownership.

Table 3 - Czechoslovakia

Enterprise	Industry	Date Sold	Stake Sold	Proceeds (Million\$)	Acquirer
Sklo Union	Glass	1990	40%	\$48	Graverbel
Zavody Solokov	Chemicals	1991	51%	53	Dow
Pragnocement	Cement	1991	40%	10.8	Heidelberger
CevaKraluv	Cement	1991	40%	20	"
Prachovice	Cement	1991	30%	42m DM	Holderbank
Jihoceska	Ceramics	1991	Majority	N/A	Laufen
VCS	Limestone	1991	49	22mDM	Lhoist
Technoplyn	Gases	1991	Majority	106	Linde
Rakona	Detergents	1991	100	24	Procter&Gamble
SkodaPilsen	Energy	1991	67%	170	Siemens
Skoda	Vehicles	1991	70%	N/A	Volkswagen
Tatra	Vehicles	1992	51%	20	Iveco
AVia	Vehicles	1992	31%	N/A	MercedesBenz
Liaz	Vehicles	1992	20%	N/A	"

Source: Perrotti & Guney 1993

During the same period, Poland offered nine firms to local investors in hopes that public offerings on a new Warsaw Stock Exchange would become the primary privatization method.

been the method of privatization but the status of the financial sector: Czechoslovakia had privatized banks early in their transition. In contrast, the state-owned Polish banking system was not functioning as an effective credit allocator. In fact, the banks themselves were in danger of failure. Interestingly, Poland may have actually perceived this as a privatization problem as it offered two banks on the stock exchange in the following year.

Table 4: Poland -Public Offerings, 1991

Enterprise	Industry	Date Sold	Proceeds (Million\$)
Prochnik	Garments	4/12/91	6.5
Krosno	Glass	4/12/91	12.4
Tonsil	Electronics	4/12/91	10.4
Exbud	Construction	4/12/91	9.8
Kable	Electronics	4/12/91	6.1
Zywiec	Beer	9/1991	14.1
Wedel	Food	11/1991	n/a
Wolczanka	Garments	7/1991	4.8
Swarzedz	Furniture	6/1991	9.6

Source: Cutler & Paczkowska, 1992

By the end of that year, the government was already considering other methods of privatization, particularly the use of vouchers, often mentioned as a factor in the successful Czechoslovakian program (Becker 1995). The critical factor in the Czech success, however, may not have

F. United Kingdom

Privatization programs in the U.K. enjoy the support of a well-developed private financial sector. Private British banks, insurance companies and securities exchanges are world leaders. Not surprisingly, in the eight years between 1979 and

1988, Britain raised more than seventeen billion pounds through privatization, a significant sum of money for any government (Aharoni 1988).

Employment levels rose after the U.K. sales (Kikeri et al, p.59), telecommunications con-

sumers were better off (Kikeri et al, p.31) and a privatized British Telecom increased investment and production with a smaller work force (Galal et al, 1992). Evidence of the U.K.'s satisfaction with privatization efforts lies in public offerings of twenty six more firms between 1988 and 1991 (Perrotti and Guney 1993).

G. France

The French government is in the midst of a massive privatization program. The preponderance of banks in the early phase of the modern privatization program indicates institutional belief in the necessity of a market-driven financial sector. In fact, the largest privatization during this period was a bank.

With the financial sector effectively privatized by the end of the 1980's, France pro-

ceeded to extend the program to large sections of the industrial base (Kikeri et al, p.47).

V. Summary and Conclusion

McKinnon (1991) argues that governments making the difficult transition from socialism to free markets ought to pursue a slow and systematic pace, carefully making changes in the right order. On the other hand, Sachs and Becker, equally famous economists, maintain that rapid change, even shock therapy, is preferable to piecemeal change and that time spent waiting for the right order to make itself known is detrimental economically and politically.

Privatization programs are a key element in these transitions and are the focus of this paper.

Recent research into design of privatization programs in Eastern Europe notes the need for speed as a key objective (Boycko et al 1994). However, the question of order, in so far as privatization of economic sectors is concerned is important; privatizations of industrial sector wither if governments maintain control of the financial sector. In countries without a private financial sector, governments retreated from privatization, and conversely, programs were expanded in economies supported by a private financial sector:

More importantly, perhaps, we can reconcile the speed versus order arguments as they concern privatization of the industrial and financial sectors. Our study indicates that there is an *incorrect* sequence, privatization of the industrial prior to the financial sector. However,

Table 5: United Kingdom: Selected Public Share Offers, 1979-87^b

Firm	Industry	Date
British Petroleum	Oil	11/79
British Telecom	Communications	12/84
British Gas	Energy	12/86
British Airways	Airline	02/87
Rolls Royce	Automobiles	05/87

^bSource:Kikeri et al, 64.

Table 6: Privatization in France, 1986-87

Enterprise	Year	Proceeds (Million US\$)
Elf Aquitaine	1986	\$ 494
St. Gobain	1986	2,064
Paribas	1987	2,827
Sogenal	1987	246
**Banque de Traveau Publiques	1987	66
**Banque Industriale et Mobiliere Privee	1987	66
**Credit Commerciale de France	1987	729
Havas	1987	1,073
Compagnie Generale d'Electricite	1987	1,342
**Societe Generale	1987	3,496
Television Francaise 1	1987	569

Source: Jenkinson and Mayer, Perrotti and Guney.

** Bank

Table 7: Nine Privatization Programs

Country		Financial Sector	Privatization Program
Chile:			
	1974-83	State-owned	Retreat
	1984-86	Private	Expansion
Mexico		Private	Expansion
Nigeria		Private	Expansion
Turkey		Mixed	Retreat
Czechoslovakia		Private	Expansion
Poland		State-owned	Retreat
Hungary		State-owned	Retreat
United Kingdom		Private	Expansion
France		Private	Expansion

simultaneous change of both sectors avoids this error. Thus, McKinnon's "natural order" argument does not conflict with Becker's "quick leap" or Sachs "shock therapy". The incorrect order can be avoided by a speedy, simultaneous privatization of both sectors! The optimal order, privatization of a financial sector prior to, or along with, industrial privatization, is intuitively appealing in that it mirrors the theoretical interdependence of the credit allocation process and capital market valuation. Our study eliminates conflict between those who argue for the "right" sequence and those who argue for "full speed ahead"; quick, simultaneous change is the "right" sequence!

Suggestions for further Research

Given the economic efficiency benefits established by earlier research, recent work focuses on program design, particularly as it affects political acceptance and short-term success. Our work indicates the need for more research into effects of the financial environment on success of privatization over the longer term. Industrial privatization occurs at the beginning of a market economy. Initial successes could be threatened in the longer term, leading to economic and political problems. More work is needed to understand effects of governmental control of Central Banks, interest rates, money supply and capital, convertibility of currency, and capital transfer controls.

References

1. Aggarwal, Raj, "Privatization and the Development of Capital Markets," Working Paper, 1995.
2. Aharoni, Yair, "The United Kingdom: Transforming Attitudes." In Raymond Vernon, editor, *The Promise of Privatization: A Challenge for American Foreign Policy*. New York: The Council on Foreign Relations, 1988, p.25.
3. Aydogan, Kusat and G. Geoffrey Booth, "Interest Rate Risk, Margins and Turkish Private and State-Owned Banks," Working Paper, January 1995.
4. Babai, Don, "The World Bank and the IMF: Rolling back the State or Backing its Role?". In Raymond Vernon, ed., *The Promise of Privatization: A Challenge for American Foreign Policy*, NY: The Council on Foreign Relations, 1988, pp. 254-85.
5. Becker, Gary S., "Rule No. 1 in Switching to Capitalism: Move Fast," *BusinessWeek*, May 29, 1995, p. 18.
6. Blanchard, Oliver J. Rudiger Dornbusch, Paul R. Krugman, R. Layard, and Lawrence H. Summers, 1991, *Reform in Eastern Europe*, MIT Press, Cambridge, MA.
7. Bolton, Patrick and Gerard Rolland, 1993, "Economics of mass privatization", *Economic Policy*, Forthcoming.
8. Boycko, Maxim, Andrei Shleifer and Robert W. Vishny, "Voucher privatization", *Journal of Financial Economics*, 35 (1994), 249-266.
9. *BusinessWeek*, "Another Blow for Hungary," February 13, 1995, p. 61.
10. _____, "Zedillo Hits the Road," April 3, 1995, p 66.
11. Copeland, Thomas E. and J. Fred Weston, *Financial Theory and Corporate Policy*, Third Edition, Addison-Wesley Publishing Inc., New York, 1988.
12. Cutler, Mary M. and Gabriella Pasckowska, "The Warsaw Stock Exchange: Bear or

- Bull?", *Managerial Finance*, Volume 22, Number 10, United Kingdom, (Summer 1996).
13. Fisher, Irving., *The Theory of Interest*, Macmillan, New York, 1930.
 14. Frydman, Roman and Andrzej Rapaczynski, 1991, Markets and Institutions in large-scale privatizations, in; V. Corbo, F. Corriceli and J. Bossak, eds., *Reforming Central and Eastern Europe economies*, (The World Bank, Wash. DC)
 15. Galal, Ahmed, Leroy P. Jones, Pankaj Tandon and Ingo Vogelsang, "Welfare Consequences of Selling Public Enterprises: Case Studies from Chile, Malaysia, Mexico and the UK," Book Manuscript, World Bank, 1992.
 16. Hayek, Friedrich A. Von., "The Use of Knowledge in Society," *American Economic Review*, Vol. 35, No. 4, (1945), pp. 519-30.
 17. Jenkinson, Tim and C. Meyer, "The Privatization Process in France and the UK," *European Economic Review* (March 1988), pp. 482-490.
 18. Kikeri, Sunita, John Nellis and Mary M. Shirley, *Privatization: The Lessons of Experience*, The World Bank, Washington, DC, 1992.
 19. Koslowki, Rey, "Market Institutions, East European Reform, and Economic Theory," *Journal of Economic Issues*, Vol. 26, (September 1992), pp. 673-705.
 20. Lipton, David and Jeffrey D. Sachs, "Privatization in Eastern Europe: The case of Poland," *Brookings Papers on Economic Activity*, 293-342.
 21. Loveman, Brian, *Chile, The Legacy of Hispanic Capitalism*, Oxford University Press, New York, 1979.
 22. ———, Second Edition, Oxford University Press, New York, 1988.
 23. McKinnon, Ronald I., "Financial Control in the Transition from Classical Socialism to a Market Economy," *Journal of Economic Perspectives*, Volume 5, Number 4, Fall 1991, pp. 107-122.
 24. Megginson, William.L., Robert C. Nash and Matthias Van Randenborgh, "The Financial and Operating Performance of Newly Privatized Firms: An International Empirical Analysis," *The Journal of Finance*, Vol. XLIX, No. 2, June 1994, p.408.
 25. Moore, John, "British Privatization - Taking Capitalism to the People," *Harvard Business Review*, January-February, 1992, pp. 115-124.
 26. Nankani, Helen, *Techniques of Privatization of State-Owned Enterprises*, Volume II, Selected Case Studies, 1988, The World Bank, Washington, D.C.
 27. OECD (Organization for Economic and Community Development), "The Privatisation of Commercial Banks in Central and Eastern Europe," in *Trends and Policies in Privatization*, Paris, 1994, pp 57-71.
 28. Oppenheim, Lois H., *Politics in Chile*, Westview Press Inc., Boulder, Colorado, 1993.
 29. Perrotti, Enrico C. and Serhat E. Guney, "The Structure of Privatization Plans," *Journal of the Financial Management Association*, Vol. 22, Number 1, Spring 1993. p. 84-98.
 30. Ramamurti, Ravi, "Why are Developing Countries Privatizing?" *Journal of International Business Studies*, 23(2), 1992, pp. 225-249.
 31. Sachs, Jeffrey, and David Lipton, *Foreign Affairs* 63, 3 (Summer 1990), pp. 47-66.
 32. Short, R. P., "The Role of Public Enterprises: An International Statistical Comparison." In Robert Floyd, Clive S. Gray and R.P. Short, editors, *Public Enterprise in Mixed Economies: Some Macroeconomic Aspects*. Washington, D.C.: The International Monetary Fund, 1984, pp. 110-94.
 33. Wolf, Charles, *Markets or Governments: Choosing between Imperfect Alternatives*, Cambridge MA: MIT Press, 1987.
 34. Yarrow, George "Privatization in Theory and Practice," *Economic Policy*, Vol. 2, 1986, pp. 324-364.