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Was Shock Therapy Really a Shock?

John Marangos

The shock therapy model derived its name from Poland's stabilization and liberalization program, initiated on January 1, 1990, which became known as "shock therapy" or "big bang." The countries that followed with the shock therapy approach were Czechoslovakia (starting January 1991), Bulgaria (February 1991), Russia (February 1992), Albania (July 1992), Estonia (September 1992), and Latvia (June 1993). In summary, the shock therapy model was a neoclassical model of transition advocating the immediate implementation of the necessary reforms to establish a free market economy.

The shock therapy model of transition, the dominant model of transition, was attractive to transition governments, international financial institutions, and mature market economies due to its simplicity and narrow transition policies recommended. "Get prices right" and the remaining elements of a market capitalist system would, more or less, fall into place was an antithesis to an institutionalist approach to transition. The shock therapy approach abstracted from the more insightful and complicated institutionalist dimensions of the transition process.

The transition process was characterized by uncertainty and the absence of any historical paradigms. Hence the *Economist's* metaphor about the transition process was that there was no known recipe for unmaking an omelette ("No Halfway House" 1990, 18). Few economists attempted to approximate the initial conditions of centrally administered economies with the stabilization programs initiated in the mature market economies. For example, Jeffrey Sachs (1993, 3) argued "the prototypical case in Europe that I will refer to is that of Spain, which in many ways provides a kind of guidepost to the path that the economies of Eastern Europe should follow." Sebastian Edwards (1992, 131)

The author is an Associate Professor in the Department of Economics, Colorado State University, Fort Collins, USA. *He is grateful to John King and two anonymous referees for their useful comments. An earlier version of the paper was presented at the workshop "Russia: Ten Years of Post-Communist Reforms" organized by the Contemporary Europe Research Centre, University of Melbourne and the Department of Economics, Monash University, Australia. He thanks the participants of the workshop for their remarks.*

argued "the large number of stabilisation attempts in Latin America during the last four decades provides a wealth of lessons—both positive and negative—on different aspects of anti-inflationary programs." Or, "an analogy is presented by what Central and Eastern Europe encountered just after World War I" (Aslund 1992, 26).

The attempt to approximate any of the initial conditions of the centrally administered economies with the experience of any mature market economy was, in my view, unwise. The stabilization programs initiated in mature market economies assume a well-functioning market with developed institutions and the dominance of private property and inflexible prices and wages in the short run and forward-looking economic actors motivated by individual material incentives. The initial conditions of centrally administered economies—such as the dominance of state property, central control of the whole economy, and the encouragement of non-material incentives—did not approximate the conditions of any mature market economy. As such, the experience of mature market economies was irrelevant for the transition process.

The Arguments in Favor of Shock Therapy

The shock therapy model highlights the interdependence and mutually supportive and interactive character of economic relationships, implying that reforms should be introduced simultaneously. Fragmented changes would have been ineffective. As one Polish economist argued, "you don't try to cross a chasm in two jumps" (Sachs 1990, 19). The program has been described as a "leap to a market economy" (Sachs and Lipton 1990, 48) and a "jump to a market economy" (Sachs 1993).

According to the shock therapy model, restructuring could not have taken place without an effective pricing system, and an effective pricing system could not have existed without a convertible currency. In turn, a convertible currency was impossible without opening the economy to international competition, and international competition could not have been effective without restructuring. The idea that there was a choice between doing one radical measure or another was simply misleading. There was no trade-off, but, on the contrary, complementarity (Aslund 1997b, 187; Ericson 1991, 24). The transition economies, experiencing such severe macroeconomic imbalances, could not have afforded to implement their reform policies slowly. "They need a strong dose of medicine quickly" (Thomas and Wang 1997, 223). Both the economic and political situation required a rapid and comprehensive reform (Lipton and Sachs 1990, 99): "[I]f a house is on fire, you do not tell the fire brigade to pour water slowly" (Aslund 1994, 37). "Shock therapy, on the other hand, means a person who, while putting in his first leg, cannot wait to put in his second one" (Woo 1994, 281). "Bitter medicine is easier to take in one dose than in a prolonged series of doses" (Balcerowicz 1994, 87). Hence, it was preferable to employ one shock instead of a series over a prolonged period (Dabrowski 1997, 47; Aslund 1997a, 16; 1994, 36).

However, the implementation of microeconomic liberalization without macroeconomic stabilization would have been a shock without therapy (Woo 1994, 278). Thus macroeconomic and microeconomic reforms had to be concurrent (Sachs 1990, 21). This was why the reform program needed to be sweeping and expedient. The negative consequences associated with the transition program, such as reduced living standards and the rise in unemployment, could have been minimized as long as the reform program was comprehensive and consistent. The transition countries should have borne the necessary recession and endured the radical reform because in the long run economic growth prospects were guaranteed (Sachs and Lipton 1990, 63). Otherwise, the period of output reduction would have been extended unnecessarily (Sachs and Woo 1994, 274). The speed of the transition process would have been negatively correlated with the continuance of output decline and positively correlated with the intensity of output recovery (Parker, Tritt, and Woo 1997, 14). Official data tended to overstate the decline in output and failed to recognize the benefits associated with increased quality of products and the eradication of queues (Balcerowicz, Blaszczyk, and Dabrowski 1997, 139). The negative outcomes were not the result of the reform process as such; rather they were due to the inconsistencies inherited from centrally administered socialism. "This mistaken attribution results in an overstatement of the 'costs' of the reforms, and therefore an undue pessimism about the reform policies themselves" (Lipton and Sachs 1992, 214). There was no foundation for criticism of the shock therapy process, which was "politically motivated rather than analytically sound" (Lipton and Sachs 1992, 214). In fact, more radical reforms would have resulted in a smaller fall in output, ceteris paribus (Aslund, Boone, and Johnson 1996, 236).

Maintaining distorted prices and entry barriers, as the gradualists recommended, would only have encouraged activities such as speculation, diversion of state supplies, and corruption. Gradualism would have resulted in an environment of ill-defined property rights, badly operated markets, distorted investment, an uneven distribution of wealth, reduced social welfare, a closed economy, high inflation, shortages, recession, social dissatisfaction, and possibly unrest (Aslund 1995, 267; Boycko 1991, 41–2; Dabrowski 1997, 54; Ericson 1991, 25). Regulation, which was really what a gradual process involved, would only have resulted in corruption by politicians and bureaucrats (Aslund 1995, 78). Once regulation is in place, it keeps expanding to repair the perceived damage caused by the original regulatory framework. Thus, self-interested groups should not have been allowed the necessary time to coordinate and change the course of the reform (Frydman, Rapaczynski, and Turkewitz 1997, 89; Aslund 1995, 99). The shock therapy process was believed to be the only efficient course, as it provided benefits quickly, with minimum private and social costs. Gradualism has not been confirmed as superior to the shock therapy approach (Aslund, Boone, and Johnson 1996, 252; Samonis and Hunyadi 1993, 20). Importantly, the longer the transition process, the more the time available for self-interest pressure groups to regroup and use their monopoly and political power to oppose the reforms. For example, the bureaucracy in Russia resisted with all means the implementation of any real reform (Aslund 1995, 91). In summary, a gradual process would have substantially undermined the credibility of the reforms. "Move too slowly and the consensus that supports the reform can collapse. It is uncertainty, not speed, that endangers a reform program and casts doubt on the government's credibility to carry it out" (Macesich 1991, x). Only comprehensive programs implemented rapidly and vigorously had any chance of succeeding. Boris G. Fedorov (1992, 108), who initially supported a gradual approach, changed his mind and argued that a gradual reform was politically unacceptable. He became one of the most important supporters of applying shock therapy in Russia.

Most importantly, a gradual process would have resulted in the wastage of the precious reserve of political capital developed after the collapse of centrally administered socialism. At the time, people were willing to accept radical solutions to the difficult economic problems they faced. A gradual process would have resulted in political competition between parties based on self-interest and, thus, disillusionment of the public. Leszek Balcerowicz, Barbara Blaszczyk, and Marek Dabrowski (1997, 135) argued that, according to social psychology, people are more willing to adjust their behavior in an environment that is going through a radical change than during a gradual change. People conceive that the initial crisis is less significant as long as there is a positive outlook for early benefits in the future (Aslund 1992, 32). In contrast, the longer it takes to implement the necessary reforms, the more the public's psychology changes, influenced by the possible social costs (Graham 1997, 338). Thus, if people had been properly informed and prepared psychologically, they would have accepted the hardships with relative ease (Aslund 1992, 176), and people were willing to accept suffering if they were convinced of the positive benefits associated with the radical solution (30). Consequently, "under the circumstances prevailing in Russia in late 1991, it would have been lethal to hesitate or move more slowly" (1995, 11). In reality, the gradualists were not gradualists at all but rather "obstructionists" (Rostowski 1993, 101).

Balcerowicz (1995, 234), attempting to justify the implementation of the shock therapy, argued that "emotionally loaded terminology is not a mistake in itself, but a potential source of mistaken judgments. One of the advantages of mathematics is that its language is entirely emotionally neutral. In discussing social phenomena, such an advantage would probably be as great as that offered by the precision of mathematical relationships." Nonetheless, sound economic policy advice, while undoubtedly based on economic theory and empirical evidence, necessarily has to involve judgment. Economic advice inevitably reflected the observer's personal assessment of each economic and non-economic performance dimension as well as the significance assigned to those performance dimensions. In addition, alternative and often conflicting economic theories used different criteria for determining how society and the economy functioned and how society should distribute responsibilities between the market and the state. Thus, different views on "social reality" and "what is a good society?" were associated with distinct methodologies and a particular set of social values, which have implications for economic policy formulae. Economic theorizing involves simplification and abstraction of complex reality; analysis of empirical evidence often imposes restrictions on theory. Simple and abstract theory and its highly restrictive econometric specification cannot deliver policy conclusions that can be directly applied to the situation of any given economy at a particular time. To advise on policy requires sound judgment that goes beyond findings for theoretical and econometric models. Such judgment will incorporate knowledge about the specific economic-political-ideological elements and institutions of the country under examination. "There is art as well as science in policy advising!" (Srinivasan 2000, 269–70). "Crony capitalism" in transition economies was increasingly paralleled by "crony research and advice"; more than 30,000 Western "consultants" had visited Moscow since the change of regime, many of them interested in assistance not to ordinary Russians but to themselves (White 2000, 141). In such an environment the non-neoclassical propositions did not have a chance of consideration.

Non-neoclassical propositions in transition economies met political, institutional, and external barriers, the same barriers that have blocked the use of non-neoclassical policies in mature market economies. Given the goals-objectives-priorities and strategies of the IMF and World Bank, "foreign aid" ensured that the dominant worldview of free markets, deregulation, privatization, and free trade were also implemented in transition economies. The worldview has changed substantially from the one during the 1950s and 60s when the plurality of ideas strongly influenced economic policy in the form of government intervention, state property, discretionary monetary and fiscal policies, and restrictions on free trade.

An analysis of the shock therapy model requires an analysis on the basis of three distinct levels. The first is the theoretical level: the neoclassical theory, which is the basis of the shock therapy theory. This level of analysis is concerned with what should happen if the transition were undertaken using this theory. As such, it is expected that the neoclassical theory would recommend immediate price liberalization, immediate privatization, immediate development of the necessary institutions, immediate establishment of an independent central bank, immediate privatization of state banks, immediate achievement of a balanced budget, the immediate introduction of free trade, and a fully convertible flexible currency. Using Sachs' statement that "Poland's goal is to establish the economic, legal and institutional basis for a private-sector market economy in just one year" (1990, 19), the theoretical basis of the shock therapy model is presented in table 1.

The second level of analysis concerns the extent to which the theory was actually adhered or how was it interpreted. A detailed scrutiny of the way the shock therapy model was formulated reveals that the model incorporated a large number of gradual policies of transition. The neoclassical theory as it was formulated for the conditions of the transition economies in the form of shock therapy had some surreptitious form of inherent gradualism. Implicitly, shock therapy supporters were admitting to some need of gradualism.

The third level of analysis is concerned with reality itself, the actual implementation of the model. The transition experience also reveals that the transition economies, which implemented "shock therapy," opted for an even more gradual implementation of "shock therapy."

Table 1. The Theoretical Basis of the Shock Therapy Process of Transition

Institutional structure	Formal institutions
Price liberalization	Price-wage deregulation
Privatization	Privatization of small enterprises
	Privatization of large enterprises
Monetary policy and the financial system	Independent central bank
	Privatization of state banks
Fiscal policy	Balanced budget
International trade	Free trade
	Flexible convertible exchange rate

Years 0 1 2 3 4 5 6 7 8 9 10

In the following an analysis of the recommended policies—institutional structure, price liberalization, privatization, monetary policy and the financial system, fiscal policy and international trade—as formulated by shock therapy supporters takes place together with an analysis of the actual implementation of the model in transition economies.

Institutional Structure

The aim of shock therapy was not only to eliminate the unreasonable distortions of the central allocation of resources but also to establish the appropriate institutions in organizing the new market mechanism for allocating resources. The transition economies did not have any capitalist institutions. In direct contrast they were command economies (Dabrowski 1997, 44). Participation in the market process, as the shock therapy supporters argued, was not based on the crude self-interested behavior of getting what you want with whatever means; rather, the means you use to get what you want must be within defined rules. Thus the transition economies required the development of an independent judiciary and an executive subject to the rule of law (Lipton and Sachs 1992, 259). This was in sharp contrast to the traditions of autocratic rule under the Tsarist regime and centrally administered socialism. The move toward a market economy required the destruction of the legal and political processes of the past (Boone and Fedorov 1997, 184; Ericson 1991, 26). Transition economies had to develop appropriate laws and institutions that included defined property rights and well-enforced rules of contract, which were essential if they were to be able to obtain the benefits associated with the market process (Aslund 1995, 264; Boone and Fedorov 1997, 181; Thomas and Wang 1997, 222). "Without law, there can be no property rights and without these there can be no real economic stabilisation or development" (Aslund 1997a, 14). In addition, the institutional structure would also have guaranteed that there would be no return to the status quo. Consequently, the reforms could not have prospered until authorities and individuals developed respect for the law and legal processes (Boone and Fedorov 1997, 184).

The institutional structure was one of the most challenging aspects of the transition modeling process (Sachs 1991a, 30). The development of institutions appropriate to the market process, although essential, was extremely complex and time-consuming and, once operative, was very difficult to change (Furubotn 2000, 121). This raised doubts regarding the feasibility of the shock therapy approach. Actually, these doubts were unwarranted. Property rights and the institutional structure, like any other good, were the result of consumer sovereignty. "Contrary to the common economist's assumption that a system of property rights is a precondition of a market economy, the development of market institutions is often a prerequisite for a viable private property regime" (Rapaczynski 1996, 102). Thus the development of market relations did not need to be postponed until an appropriate institutional structure was in place, since the emergence of markets did not require a sophisticated institutional structure. A simple economy did not need an advanced judicially enforced system of property rights. "Little economic or legislative sophistication is required" (Aslund 1992, 11). Some simple rules would have been adequate; as the markets evolved so too would have the legal system and enforcement mechanisms simultaneously. "Thus institutional structure was a necessary but not a sufficient condition for the needed reforms" (Klaus 1995, 46).

Efficient institutions could not have been intentionally designed. Governments and individuals did not have the knowledge base, because past experiences were inadequate and, in the case of centrally administered socialism, irrelevant. No one was able to predetermine the market outcome; thus there could not have been any prescription to develop market institutions. The development of the institutional structure was path independent, which implied that the development of the necessary institutions was not culturally embedded. Institutional change comes as a result of free market relations, which would have delivered, in due course, the best outcome in response to the need for structural change based on the universal principles of self-interested behavior. Fundamental changes in relative prices are the most important source of institutional change by altering norms, which subsequently creates incentives to construct more efficient institutions (North 1990, 7, 84, 138; Nee and Matthews 1996, 411; Lo 1995, 81, 85).

Individuals participate in the market process based on an evident set of rules. The culture of respect for property rights in mature market economies is not the result of habits, convictions, religious beliefs, or the rule of law (Moore 1994, 819). These could not have sustained complicated and innovative behavioral patterns; rather it would have been the result of a self-enforcing process initiated by spontaneous market behavior (Rapaczynski 1996, 89). These self-enforcing mechanisms would not have preceded the emergence of market relations. Likewise they would not have been the result of government action. While government initiation may have developed the necessary institutions, market-produced institutions frequently appeared and were operative beforehand. The development of the institutional structure was a very elaborate procedure, which the government did not have the knowledge to implement. These institutions were "nearly never created by conscious design" (Frydman, Rapaczynski, and Turkewitz 1997, 42).

In this context, since people were rational and made efficient choices using market relations, the market outcome was always an efficient one. Capitalist institutions, the result of the market process, could only be efficient institutions. This is because "exchange is the basic communicative element from which all other modern economic institutions (prices, money, private property, organisations and so on) emanate" (Dietz 1992, 37). Government supervisory bodies are inherently inefficient in providing an effective overseeing mechanism. Accordingly, any interference from the state would only have subverted enterprise ethics and should have been avoided (Aslund 1995, 213). Subsequently, institutional change was a derivative. The most important goal was the spontaneous development of market relations through the removal of most restrictions on individual activity. While the new market relations served to aid the development of the institutional structure, the institutional structure often served to strengthen the new market relations. "Indeed, the legal responses are often only effective against a background of self-enforcing market mechanisms" (Rapaczynski 1996, 102).

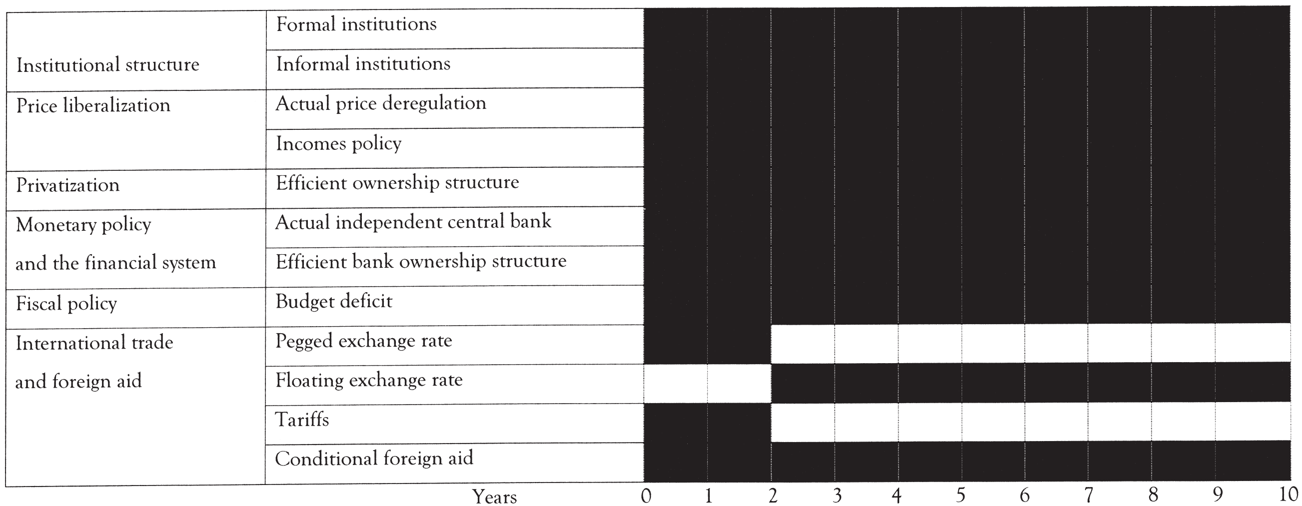
Balcerowicz (1995, 346) recognized that while economic reforms complement one another there is a distinction between liberalization and institutional reform and the former could be implemented more rapidly than the latter. At the same time, slowing down liberalization and stabilization, in order to enable them to keep pace with the fundamental institutional reform, was a dangerous option. For Balcerowicz it was impossible to implement all the changes with maximum speed, knowing, however, that stabilization and liberalization had to be largely completed before the institutional framework of the economy could be radically changed.

Hence, while prescribing an immediate transition to a market economy, the shock therapy supporters believed that the market could only have delivered operative institutions. Effectively, and paradoxically, the shock therapy approach recommended the gradual development of market institutions. The imperative of not using government intervention in the market resulted in a contradiction in the shock therapy model. Shock therapy supporters required the immediate destruction of the institutions of central administration, which implied the establishment of market institutions by the government, thus minimizing the time necessary to create these institutions, as demonstrated in table 1. In contrast, the shock therapy economists were willing to sacrifice speed in the context of institutional development in order to avoid government intervention, which they regarded as totally undesirable, as demonstrated in table 2.

Price Liberalization

Price liberalization and stabilization were preconditions for a successful reform process (Blanchard and Layard 1993, 1). Price liberalization was also required for the establishment of a hard budget constraint (Aslund 1993, 99). Reform of the price mechanism was necessary to allow prices to reach their equilibrium values. Impersonal market forces determined prices, not the government, which was influenced by political considerations (Ericson 1991, 26). In this way the increased prices reduced real money balances to the appropriate level for monetary equilibrium. Given the lack of a scarcity-based price system, it was infeasible to develop an effective stabilization program. The price system had been so distorted under centrally administered socialism that it was impossible to determine which enterprises should have closed or continued operation. Furthermore, the valuation of enterprises could not have taken place without knowing the prices of inputs: this necessitated market competition. Higher prices were in the interests of society because they eliminated shortages and queuing, induced greater availability and quality of goods, and facilitated lower prices than the black market because they eliminated the risk premium associated with illegal activities and eliminated corruption. It was better to face a single increase in prices than high and persistent inflation, since there was nothing beneficial associated with high inflation and its

Table 2. The Formulation and Implementation of the Shock Therapy Process of Transition



accompanying corruption (Aslund 1995, 175, 222). In fact, prices were often lower than on the black market, even though the official inflation rate had increased. However, in actual fact, no country fully adjusted prices in one step. Poland initiated large adjustments at the beginning; Czechoslovakia and Hungary adjusted prices more gradually. At the end of 1993 most countries still subsidized residential rents and household utilities (Balcerowicz 1995, 212). Thus, all transition economies, even those that implemented shock therapy, actually opted for a gradual process of price liberalization.

An efficiently functioning labor market was a principal prerequisite for a successful transition (Frydman, Rapaczynski and Turkewitz 1997, 63). The widespread indexation of wages and the large percentage of the labor force employed in state enterprises were obstacles to the achievement of stabilization (Sachs 1997a, 248). Thus wages should also have been market-determined, giving rise to unemployment, which was part of the remedy. However, at the beginning of the reform program, to avoid a wage-price spiral due to hyperinflation Sachs and David Lipton (1990, 56) recommended a tax-based wage policy to encourage wage rises below the increases in inflation. All countries relied on wage controls (Balcerowicz 1995, 226). For example, the Polish government initiated penalties on wage increases, the so-called *popiwek* (Balcerowicz, Blaszcyzyk, and Dabrowski 1997, 138), under which wages were to increase by 30 percent of the monthly inflation rate in January 1990 and 20 percent thereafter. Enterprises conceding wage increases above the norm were heavily taxed (Sachs and Lipton 1990, 56). Paradoxically, the shock therapy supporters recommended, and in actual fact the implementation of the model involved, a gradual process of establishing market-determined wages and a free labor market without government regulation.

Privatization

The industrial structure under the command system was inefficient since state enterprises were inefficient and inclined toward financial crisis (Sachs and Lipton 1990, 62). This was because of internal rent seeking and the imposition of non-economic goals by governments upon state enterprises, which were used as instruments to serve personal goals (Woo 1997, 306; Boycko, Shleifer and Vishny 1993, 143; Aslund 1994, 37). Thus privatization aimed to reduce political interference in the economy: "whatever else privatization is supposed to accomplish, it will fail unless it succeeds in this objective" (Frydman, Rapaczynski and Turkewitz 1997, 85). The undesirable functioning of state enterprises was due not only to soft budget constraints but also to the principal-agent problem: how can the central authority motivate managers of state enterprises to act according to plan and report truthfully on their actions and not follow their self-interest? Marketization without privatization was not considered a viable alternative. The experience of Russia, Eastern Europe, and China revealed that marketization without privatization destabilized the economy, increased inflation and the likelihood of corruption, and did not heighten efficiency (Woo 1997, 320). There was a need for a radical change in the property structure by reducing, restructuring, modernizing, and privatizing state enterprises. Consequently, "until privatization has been accomplished, the economic crisis is likely to persist" (Aslund 1992, 87).

This ruled out rapid transformational privatization exclusively based on the conventional methods and called for some of the less time-consuming non-traditional techniques (Balcerowicz 1995, 197). The privatization process had to be initiated concurrently for all enterprises, using across-the-board mechanisms: "[T]he great conundrum is how to privatize such an array, in a manner that is equitable, swift, politically viable and likely to create an effective structure of corporate control" (Sachs 1990, 22). Thus privatization should have taken place through a combination of different methods: sales, free distribution, or other means, but preferably through free distribution (Sachs 1991b, 67). Balcerowicz (1995, 199) argued that non-conventional privatization was very fast while the conventional kind was bound to be slow. In addition, conventional privatization starts with the best enterprises and then moves to the increasingly inefficient enterprises, which was inconsistent with the shock therapy approach. Maxim Boycko, Andrei Shleifer, and Robert Vishny (1993, 148) argued that the voucher auctions in Russia were a notable success in initiating enterprises into the private sector. By April 1995 three-quarters of Russian industry was privately owned (Boone and Fedorov 1997, 180). Retail shops could have been privatized immediately by auctioning them under the supervision of municipal governments (Sachs 1992, 47; Aslund 1995, 232). The privatization of land was relatively painless, and high economic advantages were associated with family farms (Aslund 1992, 77). Such actions would have helped facilitate the establishment of a market economy, reduced shortages, improved the quality of goods, and provided the privatization process with a more positive image (Chubais and Veshnevskaya 1997, 70, 71).

The shock therapy supporters argued that the government should not have allowed unreasonable claims to frustrate the process, which should have been rapid and transparent. To achieve a fast privatization process, the authorities had to avoid the lengthy, laborious, and costly task of case-by-case privatization. Case-by-case privatization becomes easily politicized. This danger is especially prevalent in important "strategic" sectors of the economy such as infrastructure and mining, which were very much in need of privatization.

Privatization and financial restructuring manifested the greatest intellectual and political complexities of the entire transition program (Sachs 1991a, 26; Aslund 1992, 11). This was due to privatization being driven by many conflicting objectives. First, there were issues of fairness, compensation, restitution, enterprise efficiency, budgetary revenues, and employment concerns. Second, it was based on previously unknown methods such as vouchers, management acquisitions, and worker buyouts, which were characterized by administrative complexity as there were thousands of small, medium, and large enterprises that operated within a legal vacuum and incomplete markets and were fraught with the possibility of corruption (Sachs 1996a, 129; Porket 1998, 205).

I believe that the concerns and reservations that shock therapy economists had about the privatization process were unfounded. The aim of the shock therapy process was to develop an economy based on market relations without the presence of discretionary power. In such an environment it did not matter whom the initial private owners were, because ultimately the only firms that could have survived were those employing efficient management practices. Therefore, whether the privatization process gave ownership of state enterprises to the workers or management, or to members of the society, they would only have been able to retain their ownership rights if they used their property productively by satisfying market demand at minimum cost. If they used their ownership for non-market purposes it would have increased the costs of production. In the long run, in a competitive environment, this would have resulted in a substantial fall in consumer demand for the goods produced by the enterprise, endangering the viability of this enterprise. For example, if labor-managed firms increased wages instead of repaying their loans, it would have resulted in bankruptcy or take-over and the removal of their ownership rights and possibly their employment. Labor-managed firms would have survived in a free market environment if, and only if, they satisfied market demand at minimum cost, similar to private firms. These firms would have lost the characteristics that made them labor managed. Victor Nee (1996, 913) argued that, due to market competition, collective ownership in China had led to behavior by the collective owners similar to that of private firms. Hence, in a competitive market, which was the ultimate goal of shock therapy supporters, only efficient owners and efficient behavior would have been able to survive, independently of how the initial distribution of ownership took place. Grigory Yavlinsky and Serguey Braguinsky (1994, 105) stated, "[T]he laissez-faire argument maintained that it does not matter who the initial owners are. It is sufficient to create free trade in new assets claims, and the most efficient owners will eventually take over." Andrew G. Walder (1996, 1060), and Xiaokai Yang (1993, 1, 2, 8) agreed with this notion. The establishment of competitive market conditions ensures that managers serve the interests of the enterprise and not their self-interest, which damages, in this way, the viability of the firm. In addition, the development of small and medium-sized enterprises, and the spread of entrepreneurial motives, helped force enterprises to behave in an appropriate manner. Andres Aslund (1995, 247) justified "irregular privatisation" in terms of avoiding the obstruction of privatization by interest groups. In a free market process, as long as "irregular privatisation" did not institute discretionary power, it was desirable. In actual fact, the development of a free market process would have derived gradually an efficient ownership structure, making the method of privatization unimportant as long as the privatization process was rapid. Thus, while privatization could be implemented rapidly, an efficient ownership structure could only be created gradually, as demonstrated in table 2.

Monetary Policy and the Financial System

Financial stabilization was extremely urgent because it "is a prerequisite for social stability and for many other reforms" (Sachs 1996a, 131). As a consequence, monetary policy was central in achieving stabilization and liberalization (Dabrowski 1997, 53). The role of the central bank had to be redefined. It had to become an effective monetary authority: it could not have been the provider of a soft budget constraint. Most importantly, there had to be only one central bank to administer the effective instruments of monetary policy. It was essential to realize that the control of the money supply and credit required one independent central bank. The central bank had to establish credit targets to hold overall money growth to levels consistent with the rapid elimination of inflation (Sachs 1993, 49). This was because inflation is a monetary phenomenon (Aslund 1993, 99; Rostowski 1993, 105). The quantity theory of money states that the monthly rate of inflation is equal to the rate of growth of the money supply minus the rate of growth in output (Sachs 1994, 5). Therefore, monetary policy should have followed a specific rule: that is, increasing the money supply in line with the increase in real output. In this way the danger of inflation should had been reduced. This was possible only by establishing an independent central bank with the aforementioned rule stated in its constitution. Independent central banks have emerged in Albania, Armenia, Bulgaria, the Czech Republic, Estonia, Hungary, Poland, Slovakia, and Romania (Grabel 2000, 6).

In reality, while the Czech Republic, Poland, Hungary, and Slovakia established "independent central banks," the central banks in Hungary and Poland were supposed to support the governments' policies as well as attaining price stability. The central bank in the Czech Republic, the most "independent central bank" out of the four mentioned, implemented monetary policy in close cooperation with the government (Anderson, Berglof and Mizsei 1996, 73–4). All "independent central banks" have provided subsidized credit to enable unprofitable, but politically important, enterprises to survive. It appears that the development of an independent central bank in transition economies had to be a gradual process, involving the gradual reduction in interventionist policies of the central banks. The process from a dependent central bank due to the inheritance of the past to an independent central bank could only be gradual. During transition the "independent" central bank had to provide support to the liberalization and stabilization policies initiated by the reformist governments. Thus, while "independent" in the books, the central bank initiated interventionist policies under the guidance of the reformist government. As the economy is liberalized and stabilized, the interventionist policies of the central bank lose strength and influence until the economy is fully liberalized and stabilized and the interventionist policies are not required any more. Only when the economy is fully liberalized and stabilized can the central bank be truly independent. Thus the actual implementation of the shock therapy model revealed a gradual process of establishing an independent central bank.

The privatization of the banking system was essential to facilitate the reallocation of resources. Meanwhile, the development of efficient owners as a result of privatization of state banks, in the same way as the privatization of state enterprises, could only be the result of a gradual market process.

Fiscal Policy

The reduction of large budget deficits was required in order to eliminate hyperinflation. As the budget deficit was the main source of money creation and, hence, inflation, the reduction of the budget deficit was at the top of the agenda for any economic reform plan (Fedorov 1992, 105). Contracting military expenditure, extinguishing subsidies, eliminating enterprise investment financed by government expenditure, and reducing state administration expenses could easily have reduced the budget deficit. In addition, the aim was to reduce the power of the bureaucracy to sabotage the reform, with no reductions in social expenditure being necessary (Aslund 1995, 181). However, the reduction in the budget deficit would have resulted in a number of inefficient firms closing down, as the sources of their survival—government subsidies and inexpensive credit—were eliminated. A balanced budget or, even better, a surplus (Aslund 1992, 66) and fiscal responsibility were essential guarantees to new firms and foreign investors that the transition government was serious in putting its affairs in order. The budget deficit was directly linked to the inflation rate. The higher the budget as a percentage of GDP, ceteris paribus, the higher the inflation rate. Consequently, "in this sense, the most important step towards monetary stabilization is, in most cases, not really monetary policy, but fiscal policy" (Sachs 1997a, 249). This was why the IMF and other international organizations recommended that the transition economies substantially reduce their budget deficits. Meanwhile, the reduction in the budget deficit would have resulted in a substantial increase in the resources available to alleviate the "short-term" negative consequences of the transition program, such as unemployment and reductions in the standards of living.

Sachs (1994, 6) argued that while reducing the budget deficit could reduce inflation, altering the way in which the deficit was financed could also decrease the budget deficit. Inasmuch as the budget deficit was financed by foreign financial resources (such as foreign borrowing, grants, aid) or by domestic borrowing (by the creation of a Treasury bill market), it would not have resulted in inflation. The introduction of a Treasury bill market would have allowed flexibility in fiscal and anti-inflationary policy by permitting the government to borrow from domestic investors rather than printing money. Consequently, it was possible to have low inflation and a small budget deficit, which could have financed the necessary social programs. A Treasury bill market would also have absorbed the excessive savings due to the monetary overhang (Frydman, Rapaczynski, and Turkewitz 1997, 63). The benefits of Treasury bills were acknowledged by some transition economies which established a Treasury bill market (Sachs 1997a, 246).

The insistence of the IMF on budget cuts rather than deficit financing did not allow aid to be used to finance the budget deficit (Sachs 1994, 8; Martinez-Vazquez, Rioja, Skogstad, and Valen 2001, 503). In fact, IMF aid was conditional on reducing the budget deficit. For example, while the Russian government revealed that it would have liked to sell bonds to finance the budget deficit, the IMF showed no interest in its proposal (Sachs 1994, 9). However, the loans provided by the IMF were very short term in nature and were offered at commercial rates. These loans were used to finance government expenditure on imports. But "such cuts are economically and politically unjustified" (7). There might have been some concern over financing the budget deficit with external resources because it would have increased public debt. However, there was an argument for the provision of grants rather than loans, as occurred for example with the Marshall Plan. Nevertheless, even if external financing were provided in the form of loans, the transition economies would have been able eventually to repay them. For example, the public debt of Russia as a percentage of GDP in 1993 was less than that of almost all OECD countries (8). The loans would have been managed productively and also used to fight inflation. "There is therefore room to borrow now in support of stabilisation and consolidation of the reforms" (8). In addition, the budget deficit could have been financed by privatizing state enterprises. This would have ended the responsibility to provide subsidies, creating a further positive impact on the budget (1997a). Effectively, the shock therapy supporters recommended a gradual process of achieving a balanced budget by maintaining a budget deficit during transition, as demonstrated in table 2.

International Trade

The shock therapy supporters advocated complete liberalization of the international trade sector by currency devaluation to the black market level and the removal of trade barriers. Radical trade liberalization was an essential component of the successful trade performance of transition economies (de Menil 1997, 275). It also seemed likely that free trade was the way to initiate competition. Trade liberalization would have created positive externalities by stimulating privatization, even though privatization was taking place slowly due to political pressures and sectoral interests (275). Transition economies would have been able to import a rational price system and benefit from the transfer of technology, which would have stimulated increases in productivity growth. This would also have permitted the reduction of environmental pollution, since foreign investors would have been able to modernize plants and equipment (Esty 1997, 378). Due to international integration, a substantial increase in exports would have taken place, with the mature market economies removing their previous reliance on the Soviet Union.

The liberalization of international trade and the establishment of a convertible currency were among the most important prerequisites for a successful transition to capitalism (Aslund 1995, 174). Essentially, "convertibility and external liberalisation are natural bedfellows" (Sutela 1992, 89). The exchange rate should have been liberalized at the same time as domestic prices, which would have reaffirmed both the complementary nature of economic policies and the need for a shock therapy approach. The traditional arguments that devaluation would not have stimulated exports but only increased the price of imports, that trade liberalization resulted in unemployment, and that protectionism had to remain had no empirical basis. "These arguments were false for Latin America, and they are false for Eastern Europe" (Sachs 1991b, 67). Limitations on international trade, such as tariffs, trade licenses, and quotas, should have been eliminated.

A freely floating exchange rate would have adjusted to reduce inflation and stimulate competition. The achievement of a stable foreign exchange market was only possible by maintaining a restrictive monetary policy. The government might have wished to maintain a fixed exchange rate. I believe that both fixed and floating exchange rates are consistent with the shock therapy approach, since neither involves government intervention. Nevertheless, a fixed exchange rate eliminates the instability caused by a fluctuating exchange rate. Sachs (1996b, 149; 1997a, 249), Aslund (1995, 183), Stanley Fischer, Ratna Sahay, and Carlos A. Vegh (1996, 62) and Pekka Sutela (1992, 92) were in favor of a pegged exchange rate at the start of the stabilization programs and then a more flexible rate after one or two years. The international experience revealed that the most successful stabilization programs were based on a pegged exchange rate, such as in Bolivia in 1985, Israel in 1985, and Mexico in 1987 (Sachs 1997a, 251). In the transition economies, the early peggers—Czech Republic, Estonia, Hungary, Poland, and Slovakia—performed much better than the floaters in reducing inflation. The peggers achieved inflation below 100 percent per year by 1994 (Sachs 1996b, 149). It was the intention of the Gaidar government in Russia to peg the exchange rate. However, the necessary financial resources required for the stabilization fund—$6 billion—did not exist. Again, this highlighted the urgency and the importance of foreign aid. Nonetheless, the IMF was not willing to establish a stabilization fund as long as the exchange rate was not stabilized. But if the exchange rate had been stabilized there would not have been a need for the stabilization fund (Aslund 1995, 67, 183).

Foreign direct investment would have been encouraged as long as the traditional conditions existed: political stability, free markets, an appropriate legal environment, and a stable and convertible currency (Aslund 1992, 58). These conditions could only have been achieved by using the market mechanism. As already argued, the development of an institutional structure based on self-enforcing mechanisms would have been able to attract foreign investment. Protectionism was inconsistent with the shock therapy model. Moreover, protectionism by mature market economies "could undermine the economic logic of reform and eat away the political and social consensus of the reform program" (Sachs 1993, 102). However, there was some justification for a low tariff in the initial stages of transition, of about 10 percent to 15 percent, to protect domestic industries for a very short time and to raise state revenues (Aslund 1992, 48).

Thus the shock therapy supporters formulating the necessary policies were effectively in favor of a gradual process of establishing a free trade regime. In the initial period of transition the exchange rate had to be pegged and tariffs had to be maintained, as demonstrated in table 2.

The Process of Transition: The Formulation and Implementation of the Shock Therapy Model

Balcerowicz (1995, 179–80) pointed out that the Polish transition program was radical but non-dogmatic. It was radical because many important reforms were implemented almost at top speed, but it was non-dogmatic. Because market-type mechanisms were not introduced during the first stages in areas where the necessary institutional conditions did not exist, the transitional non-market arrangements appeared to be more effective. In Poland wages were not deregulated; actually wage controls were strengthened. Interest rates were raised sharply from their deeply negative real level but not fully liberalized in the first stage. Quantitative foreign trade barriers were largely abolished, but customs duties were maintained, albeit at a reduced level. Prices of energy and other utilities had been brought to their equilibrium level in several steps and not in one huge jump. The Russian transition program differed significantly from the Polish in that it did not include wage controls of any sort, and it introduced a flexible rate of exchange for the ruble. It appears that the Russian stabilization program was much more orthodox than the Polish program. The monetary restraint was to be the only anti-inflationary barrier. Enterprises granting excessive wage increases would basically face bankruptcy, and their workers, unemployment. In the Polish program, there were two additional restrictions: control on wages and the fixed rate of exchange, which should have calmed inflationary expectations. By January 1992, it turned out that there was another significant difference in the programs: the liberalization of prices in Russia was much more limited (366).

Even though the shock therapy process implied an immediate liberalization of markets, as we can see from table 2, most elements of the transition program, in actual fact, had to be introduced gradually and were actually introduced gradually in transition economies. As such, the necessary institutional structures, both formal and informal, could only have been developed gradually. An incomes policy had to be maintained throughout the transition process. An efficient ownership structure could only develop gradually. A truly independent central bank could only be the result of a gradual process. In addition, a balanced budget could only have been achieved after the maintenance of budget deficits funded by foreign aid and/or a Treasury bill market. A fully convertible exchange rate could only have been implemented after maintaining the pegged exchange rate and tariffs during transition. The shock therapy process of transition is demonstrated in table 2.

How Did the Shock Therapy Supporters Explain the Collapse of the Model?

The implementation of the shock therapy model was short lived. Despite the substantial initial support for governments initiating the process in transition economies, considerable undesirable outcomes resulted, such as unemployment and inflation. This led to the unpopularity of the governments. High inflation and unemployment caused social and political instability and threatened the fragile democratic governments. As Boycko (1991, 44) argued, "no matter how strong the purely economic case for 'big bang' price decontrol is, this measure cannot be recommended to a politically weak government whose primary objective is to stay in power." Intrinsically, these governments did not have the power to pursue the policies required by the shock therapy platform. In a democratic environment, the substantial reduction in output and employment associated with shock therapy resulted in the ultimate downfall of these governments through the electoral process.

The shift to gradualism took place in Poland on September 19, 1993, in Russia on December 12, 1993, in Bulgaria December 18, 1994, in Estonia on March 5, 1995, in the Czech Republic on June 1, 1996, in Albania June 19, 1997, and in Latvia on July 25, 1997. In all cases, this occurred after unfavorable election results for the shock therapy governments.

Sachs (1991a, 31) argued that the reform program could be achieved "only if the reforms are given the time to work." In reality, "Russia and the West have never missed an opportunity to miss an opportunity. . . . Unfortunately, the West failed miserably to speed the needed reforms" (Sachs 1997b, 127). Lipton and Sachs (1992, 216) were well aware of the necessary conditions for the shock therapy process to succeed: "[I]n our view, the social basis for the reforms exist. The real test will be in the area of political reform and in the extent of Western support."

Stephen Parker, Gavin Tritt, and Wing Thye Woo (1997, 8) and Peter Boone and Boris Fedorov (1997) recommended a better political management of the reform process in Russia. They argued, surprisingly, that in-depth political reforms would have improved the outcome and the credibility of economic reforms. Nevertheless, accepting an argument like this does not resolve the contradiction. The argument is tautological. By identifying reforms as unsuccessful, they are also being branded as non-credible (Ickes 1996, 302). Could it be argued that a better political management of the market reform process, or more credible policy makers, would have made possible the survival of the shock therapy model in a democratic environment without any substantial financial support? Unfortunately, for the shock therapy supporters, the answer is no. In contrast to my view, Boone and Fedorov (1997, 185) argued that "these benefits must be contrasted with the Russian reality that very often foreign assistance has slowed reforms—because it allowed Gorbachev, and Russian president Boris Yeltsin, to temporarily postpone making needed policy changes." However, the amount of foreign aid was so inadequate that it was unable to influence the political decision-making process. In the end, "the problem is political" (Aslund 1995, 312).

Aslund, Boone, and Simon Johnson (1996, 227) argued that the shock therapy process did not lead to public discontent. According to their interpretation of events, the public demanded faster reforms and the dissatisfaction with gradualism was greater than it was with shock therapy. As a result, gradualists were more likely to lose elections than shock therapy governments. However, where the shock therapists lost elections it was because they were less well organized than the former communists (Aslund, Boone, and Johnson, 1996). In addition, it was not uncommon for incumbent governments to become unpopular irrespective of the economic outcomes (Roland 1994, 30). Balcerowicz (1995, 164) argued that it was a mistake to attribute the electoral defeats of the political forces of reform to one sort of economic program. Electoral defeats happened in 1993 in Poland, a radical reformer, but also in Lithuania, Russia, and Hungary, where radical reform never came close to being adopted. Thus Balcerowicz concluded that the causes other than the type of economic program must underlie these outcomes. It is worth noting that while gradualist reform governments replaced shock therapy governments, a radical leadership never replaced the gradualists. Other gradualists always replaced gradualist reform governments.

Balcerowicz (1995, 163) argued that attributing widespread dissatisfaction to "shock therapy" would have been a mistake because under the initial conditions of transition economies, any economic policy package would have generated discontent. There was no a priori reason to expect that the dissatisfaction as a result of radical reforms was greater than that achieved by non-radical reforms (Balcerowicz 1995, 163). His reason was that when political liberalization freed the media, it focused on once-forbidden negative stories, a tendency strengthened by the generally low levels of professionalism displayed by journalists trained under centrally administered socialism. As a result, there was a sudden increase in the public's exposure to negative mass media coverage like crime and poverty. "This 'visibility effect' absent in classical democratisations, was likely to encourage unfavourable assessments of the whole transition and, consequently, to influence electoral outcomes and the subsequent direction or pace of the economic transition" (152–3). Nevertheless, it is the responsibility of the government to assure that the economy performs at a satisfactory level. Governments that do not achieve satisfactory economic results inevitably get thrown out of office; governments that succeed are likely to remain in office (Pressman 2001, 110). The fact remains: governments which implemented shock therapy lost power after only one term in office, leaving the reform process in disgrace. The new governments, dominated usually by ex-communists, reversed the course of reform and proceeded with a gradualist transition approach. Hence shock therapy as a political strategy turned out to be suicidal for the governments that launched it, notwithstanding the scars of shock therapy would remain for a long time.

An Institutional Approach to the Transition Process

An optimal sequence of the transition process required foremost a combination of state- and market-produced institutions. Immediate government intervention was required in setting up the minimum institutional structure essential for the operation of the market. An institutional core was essential to ensure economic development in transition economies. It was important to allow the market to nourish and expand state-produced institutions through the development of both formal and informal market-produced institutions and trust. The notion that careful groundwork could have allowed them to "get things right" the first time was unfeasible. Economic actors would normally require time to experiment and make mistakes to bring about an efficient institutional structure; thus the transition process required gradualism.

Conclusion

At the end, not surprisingly, shock therapy supporters argued that "real shock therapy" was never implemented. As Sachs (1997b, 127) claimed about Russia: "Despite the uproar in recent years about 'shock therapy' in Russia, knowledgeable observers understand that it simply never occurred, an obvious point when one compares Russia's disorganized and partial stabilization efforts with the decisive actions in the Czech Republic, Estonia, or Poland." In reality, in Russia "real laissez faire for the benefit of the private sector persisted only for a period of three months, from February to April 1992" (Aslund 1997c, 200). In addition, "in Lithuania, Russia, and Hungary, radical reform never came close to being adopted" (Balcerowicz 1994, 87). But this explanation begs the question and leaves a large gap between theory and practice in explaining the failure of the shock therapy approach. However, Aslund (1995, 312) stated, "[G]ood theory has stood the test, whereas poor theory has proven faulty." Indeed the failure of the shock therapy program to incorporate the political process, concentrating instead on economic relationships, led to the demise of the model. Despite these arguments, Aslund (1997a, 316) was adamant: "[T]he case has nevertheless been made: Russia could (and did) reform, and it has become a market economy." Wherever radical reform took place, the succeeding ex-communist governments continued the reform process (Aslund, Boone, and Johnson 1996, 273), but at a slower pace. As a result there might have been instability but not a total reversal of the reform (Fedorov 1997, 126).

It appears that while the theoretical underpinnings of the shock therapy model required the necessary policies to be implemented in one shot, the formulation of the model as interpreted for the conditions of the transition economies to a large extent incorporated gradual policies, and the actual experience of transition economies reveals that those economies, which implemented shock therapy, opted for an even more gradual implementation of the model. As such, "real shock therapy" was never implemented because, in actual fact, both the formulation and actual implementation of shock therapy did not involve a shock, rather a gradual process of transition.

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