

In 1999, SigmaBleyzer initiated the International Private Capital Task Force (IPCTF) in Ukraine. Its objective was to benchmark transition economies to identify best practices in government policies that improve the investment climate and attract private capital. An Action Plan was developed and presented to the Ukrainian government which identified the economic policy actions necessary to improve the investment and business climate in Ukraine, attract additional flows of private capital to the country; support economic growth, and improve the quality of life for their citizens. In 2001, this effort was expanded to all countries of the FSU, and IPCTF ratings for all 15 countries of the FSU were developed. They are available from SigmaBleyzer and The Bleyzer Foundation.

The Bleyzer Foundation was established in 2001 in order to promote the IPCTF framework and help countries implement the policies necessary to successfully complete transitions to market economy.

The Foundation's Managing Director is Mr. Victor Gekker, who is supported by a team of economists and business analysts. The Advisory Board of The Bleyzer Foundation is chaired by Dr. Edilberto Segura and provides advice and guidance to the activities of the Foundation.

# Privatization's Effects on Social Welfare in Ukraine: The SigmaBleyzer Experience

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When Ukraine declared independence in August 1991, it became Europe's second-largest country in terms of land mass and its fourth largest in population, with 50 million people. Owing to its rich agricultural soil, Ukraine is the breadbasket of the former Soviet Union, providing most of its agricultural needs. The country is noted for its mineral resources, particularly iron ore and coal. It has an adequate infrastructure and a well-educated, skilled labor force, with a significant foundation in engineering and science. These resources have made it possible for Ukraine to supply much of the former Soviet Union's heavy industry.

## Economic Challenge: An Overview

Despite such favorable conditions, Ukraine has, since independence, faced one of the most difficult economic challenges in Eastern Europe, including an eight-year recession. From 1991 to 1999, GDP declined every year, with a cumulative decline of about 60 percent. This recession was protracted because of the country's unfavorable conditions immediately following independence, including major structural weaknesses and an economy highly dependent on other former Soviet Republics. The Soviet Union's collapse cut these production and trade relations. In addition, Ukraine's military industries — 25 percent of all its companies produced military goods — were left without markets after the Cold War ended.

Because of negligible energy costs during the Soviet era, many industrial processes were energy intensive. For example, in the early 1990s, Ukraine consumed six times more oil per unit of GDP than did Western Europe. Energy imports remain important; in 2002, oil and gas imports represented 40 percent of merchandise imports and 20 percent of GDP. These energy-intensive firms suffered greatly after independence, when energy costs increased 5 to 10 times.

Although the 1991 decline in GDP was amplified by unfavorable initial conditions, the piecemeal, uneven implementation of economic reforms — caused by lack of political consensus and opposition from

parliamentary groups and others with vested interests — helped to prolong the recession that followed. In fact, the structural weaknesses that had characterized Ukraine during the Soviet era called for major corporate restructuring after independence. Unfortunately, during 1991-95, little was done. The government followed what it termed a preservation strategy — that is, it attempted to maintain the status quo by paying state-owned enterprises (SOEs) large, direct subsidies. Relying on government subsidies for their existence, SOEs had little incentive to restructure or privatize, and remained largely inefficient. These government subsidies led to large budget deficits, their monetary financing, and hyperinflation. During 1992-93, with total fiscal expenditures at about 65 percent of GDP, the fiscal budget deficit reached 25 percent and 16 percent of GDP, respectively. Monetary financing of these deficits led to high annual rates of inflation, which peaked at 2,609 percent annual average for 1992, over 1,000 percent in 1993, and remained above 100 percent per year in 1994 and 1995.

In 1994, Leonid Kuchma was elected president on the basis of a reform agenda. During 1996-98, economic reforms progressed in many areas. For example, prices and international trade were liberalized, small and mass privatization programs were advanced significantly, the National Bank of Ukraine (NBU) was strengthened, and monetary policy was implemented wisely. In addition, a new currency, hryvnia or UAH, was successfully introduced in September 1996; inflation was reduced to 10 percent by mid-1998, and the exchange rate was maintained within a narrow range (averaging about 1.9 UAH per dollar from 1995 to mid-1998). Ukraine accepted International Monetary Fund (IMF) obligations under Article VIII (which requires foreign exchange convertibility for current account payments); moreover, a new constitution was approved in 1996, which guaranteed private-property and market-based principles for the country's economy.

However, the fiscal budget deficit was not brought under control, remaining at about 6 percent of GDP from 1996 to mid-1998. During 1991-98, fiscal budgets were prepared unrealistically, with overestimated revenues and excessive expenditures. In addition, the tax base was reduced by innumerable privileges and exemptions. Through the end of 1997, these fiscal budget deficits were financed by foreign borrowings. External debt increased from \$4.4 billion in 1994 to \$11.5 billion in 1998. Domestic government, short-term obligations (Treasury bills) increased to UAH 10 billion (\$5.2 billion equivalent) over the same period. Although the absolute size of foreign debt was not excessive, this debt was of short maturity. Therefore, the level of annual debt-service payments was high, reaching \$3.2 billion in 1998, which heavily pressured government finances.

The Asian crisis, large repayments on foreign debt, and delays in implementing fiscal and structural adjustments in Ukraine changed investor perceptions of the country. Furthermore, structural reforms had not reached the critical mass needed to revive confidence, investment, and growth on a sustainable basis. In mid-1998, the Russian financial crisis accelerated capital outflows from Ukraine. Foreign reserves declined from \$2.3 billion at the beginning of the year to about \$1.0 billion by mid-year. With international reserves declining rapidly, the NBU was forced to stop selling foreign exchange in September 1998. Results of the financial crisis were far-reaching, including depreciation of the Hryvnia from about 1.9 UAH: US\$1 in December 1997 to 3.4 UAH: US\$1 by the end of 1998.

Despite the severity of the 1998 financial crisis, Ukraine dealt with it successfully without resorting to printing money. The country was able to negotiate the voluntary restructuring of its public debt. Most importantly, from September 1998 on, fiscal budget accounts were kept close to balance. The deficit for 1998 was contained at 2.1 percent of GDP (compared to 6.8 percent in 1997). In subsequent years, Ukraine has been able to maintain fiscal discipline, with fiscal deficits below 2 percent of GDP. Control of large fiscal deficits has been a significant achievement since, historically, they were the major source of the country's economic imbalance.

In addition to its broadly satisfactory fiscal and monetary policies, the Ukrainian government implemented important economic reforms in 2000-02. These included

- progress in privatizing large SOEs (six energy-distribution companies were privatized successfully in 2001);
- land reform in early 2000 that transferred ownership to individual farmers and initiated the issuance of certificates and titles;
- elimination of unwarranted government interventions in the agricultural market and its commercialization;
- elimination of barter in utilities, with cash collections in the energy sector increasing from about 12 percent of sales in 1999 to 85 percent in early 2001;
- significant reduction of barter in international trade;
- simplification of business registration requirements;
- reduction in the average number of government-agency inspections of businesses from about 70 per year in 1990 to about 30 currently;
- introduction of European import certification standards, with mutual recognition of certifications;
- improvements in aligning customs procedures to European standards;

- approval of the Laws on Banks and Banking Services;
- approval of the Criminal Code;
- approval of the Budget Code, which sets clear, transparent formulae for transfer of funds to local governments;
- introduction of personalized accounts in the pension system; and
- successful external-debt restructuring, including the Paris Club and gas debts with Russia and Turkmenistan.

Control of the fiscal deficit and implementation of these economic reforms have had a major beneficial effect on the economy, with positive GDP growth of 5.9 percent in 2000, 9.1 percent in 2001, and 4.1 percent in 2002. Furthermore, since the beginning of 2000, the country has had positive foreign trade and current account balances. The foreign exchange rate has been stable, at about 5.4 UAH: US\$1 since early 2000. Foreign reserves increased from \$1 billion in early 2000 to \$4.3 billion in January 2003. The size of external public debt declined significantly, now representing only 25 percent of GDP (Appendix B).

Despite these advances, significant improvements are still needed to sustain long-term growth. Revived level of investment in the economy is particularly needed. Given the high level of unused capacity, economic growth has been based on better use of existing investments. However, beyond 2002, growth based on improved use of existing capacity will be limited since existing plants are reaching full use capacity. Thus, continued growth in the future requires significant additional investment, particularly foreign investment, since domestic savings are low.

Level of foreign investment has, however, remained low. A recent study conducted by International Private Capital Task Force (IPCTF), under chairmanship of the SigmaBleyzer Corporation, outlined specific policy measures with which to attract more foreign investment to Ukraine. The study recommended nine policy measures, whose effects were estimated from statistical analyses carried out in a sample of 50 developing countries. Listed according to their estimated effect on the flow of foreign direct investment (FDI), these nine areas, in order of priority:

1. liberalize and deregulate business activities,
2. provide a stable and predictable legal environment,
3. enhance governance and reform public administration,
4. remove international capital and foreign-trade restrictions,

5. facilitate financing of businesses by the financial sector,
6. reduce corruption,
7. minimize political risk,
8. improve country promotion and image, and
9. rationalize investment incentives.

The study showed that the first three policy areas were statistically significant in the sample. Surveys carried out in Ukraine showed that these three areas were the most important investment drivers in the country, while the other six were important in attracting significant investment. Based on this study, the Ukrainian government developed an action plan in all nine areas. Successful implementation of the plan would make privatization of the remaining large SOEs more plausible.

### **Historical Review**

Privatization in Ukraine, which began in 1992, aimed at transforming the country from a centrally planned to a market-based economy, increasing the private-sector share of industry and finding strategic investors to accelerate development of industries and companies. The privatization process, which has continued to evolve, is characterized by three distinct phases. During the first stage, 1992-94, the process advanced at a modest pace. During the second stage, 1995-98, the pace accelerated, with nearly 70 percent of all privatizations implemented. Some 80 percent of the industrial sector is now privatized. The current third stage, 1999-present, centers on privatizing the largest remaining SOEs, mainly in electricity distribution, telecommunications, and metallurgy, as well as fertilizers and petrochemicals.

#### **First Stage: 1992-94**

During 1992-94, the main form of privatization was the leasing of entire property complexes by company employees, with full ownership transferred at the end of the leasing period. Privatized enterprises were mainly companies in the food and light industrial sectors. In many of them, directors averse to losing control took advantage of this form of privatization. While the formal majority of leaseholders and shareholders were employees, top managers effectively controlled the firms.

This form of privatization did not guarantee efficient ownership or management. Traditionally, SOEs were merely production units, without any sales, marketing, or financial functions. Most managers,



therefore, were not equipped for their new role. Only those enterprises able to compete in a market economy did better. The social effect of this stage of privatization — namely employment, salaries, and social welfare — depended primarily on management's ability to operate in this new business environment. The destiny of these companies and their employees, as well as these companies' effect on GDP growth and welfare improvement, depended on management's ability to maneuver current emerging-market conditions.

Still, many companies taken over and controlled by their managers succeeded. The financial results of these companies were usually positive, despite the economic crisis. Financially, privatized companies performed better than enterprises that remained in government hands. However, the reason could have been that, during this period, companies taken over by their managers were the most economically attractive before privatization.

Conversely, like other experiences in the region, few companies with broad employee ownership succeeded. Many businesses privatized in this way did not survive for long. In most cases, a wealthier group of managers took them over, generally forcing many people out of work.<sup>1</sup> Despite the few employee-operated success stories, such as Mariupol Iliche Steel or the Kharkiv Biscuit Factory, most ended in asset stripping or bankruptcy.

**Table 1. Ukraine: Number of companies privatized, by size, 1992–2002**

Year	Small	Medium or large	Total
1992	32	11	43
1993	2,434	1,253	3,687
1994	5,338	2,010	7,348
1995	10,320	4,562	14,882
1996	17,480	8,803	26,283
1997	8,554	7,308	15,862
1998	6,080	7,419	13,499
1999	4,518	3,660	8,178
2000	5,137	1,737	6,874
2001	5,321	929	6,250
2002	674	100	774
<b>Total</b>	<b>65,888</b>	<b>37,792</b>	<b>103,680</b>

Source: State Property Fund of Ukraine.

The effects of this "lease-with-an-option-to-buy" stage of privatization on Ukraine's sociopolitical situation were controversial since, by this time, the economy faced a systemwide crisis. Employees of privatized enterprises could keep their jobs, but ownership became concentrated in the hands of a few privileged, former managers. This stage resulted in the partial or complete privatization of more than 11,000 Ukrainian companies (Table 1). It also established a

<sup>1</sup> Few statistics from this time support such conclusions; rather, they are based on the observations of this chapter's authors, all of whom were working in Ukraine during this period.

legislative base on which all future privatizations would be organized. The government passed laws on privatization of small, medium, and large state companies.

### Second Stage: 1995-98

During the second stage, 70,526 enterprises were privatized, representing about 70 percent of all privatizations since 1991. About 60 percent or 42,000 second-stage privatizations were small enterprises, many of which were engaged in trading activities. They were sold mainly to the firm's employees and managers. The remaining 28,000 enterprises were medium-and large-scale companies, which were sold to both employees and the public through the mass privatization program initiated and completed during this period.

Begun in 1995, the mass privatization program gave all Ukrainian citizens the right to obtain privatization certificates or vouchers, a special type of security that could be exchanged for shares of state companies sold in special privatization-certificate auctions conducted by the National Certificate Auctions Network.<sup>2</sup> Another type of security, known as the compensatory certificate, was issued to cover losses incurred by depositors in the State Savings Bank under the Soviet Union or during the 1991-95 period of hyperinflation.

**Table 2. Ukraine: Number of Certificate Auctions, by stake percentage, 1994-2000**

Year	0-5	5-25	25-50	50-75	75-100	Total
1994	8	62	85	37	15	207
1995	83	455	487	231	9	1,295
1996	591	3,073	1,572	257	20	5,513
1997	945	4,335	1,569	178	25	7,052
1998	1,549	3,963	898	59	3	6,472
1999	41	144	27	0	0	212
2000	85	147	9	0	0	241
<b>Total</b>	<b>3,302</b>	<b>12,179</b>	<b>4,647</b>	<b>762</b>	<b>102</b>	<b>20,992</b>
<b>Percent of Total</b>	<b>15.7</b>	<b>58.0</b>	<b>22.1</b>	<b>3.6</b>	<b>0.5</b>	<b>100</b>

Source: SigmaBleyzer.

The voucher and certificate auctions worked as follows: 150 to 250 companies were put up for sale each month. By the end of this stage, their number had grown to more than 500 per month. The owner of a voucher could apply to purchase shares of any company that was auctioned. The size of each applicant's stake was then determined by the total number of applicants for that company (none were refused). At the completion of the auction, the new shareholder received documents certifying all shareholder rights. Between 1994 and 2000, 7,272 enterprises were privatized through voucher auctions. Table 2 shows the total number of certificate auctions made during this period with many enterprises offering shares for sale

<sup>2</sup> The Economist Intelligence Unit, *Country Economic News*, February 1, 2002.

several times). Of the nearly 21,000 transactions that occurred, more than 8,000 represented small- and medium-sized state companies. By the end of this stage, enough companies had been privatized to enable the stock market to reach a critical mass. At this time, individuals and companies began over-the-counter trading of shares.

The mass privatization program had unanticipated side effects. For example, Ukrainian citizens could not purchase vouchers in large enough quantities to influence the management of their companies as the legislative base did not — and still does not — provide for cumulative voting or other forms of protecting minority shareholder rights. Shareholders have significantly fewer mechanisms than in the West to protect their various rights. Furthermore, many Ukrainian citizens sold their certificates before the auctions. In fact, during the early and mid-1990s, high inflation rates and destruction of savings led to increased poverty. Since people needed ready cash for buying food and paying for housing, many decided it was more beneficial to sell their privatization certificates to companies and investors that purchased them for 2–8 Hryvnias (approximately US\$1 to US\$4 at that time), less than their par value of UAH 10. Having acquired a significant number of certificates, these investors participated directly in competitions and auctions. Similar to the Russian experience, only a handful of Ukrainians became real owners. Their ability to influence company management and operations occurred, in many cases, at the expense of unprotected minority shareholders. Thus, while the mass privatization program may have succeeded in transferring many enterprises to the general public and creating incentives for companies to improve operations, it failed to create sound corporate governance in most enterprises, which led to the abuse of minority-shareholder rights.

### **Third Stage: 1999 to Present**

After 1998, the remaining enterprises to be privatized consisted of firms in strategic and monopolistic sectors, including electricity distribution (known as "oblenergos"), metallurgy, telecommunications, and petrochemicals. Unlike stages one and two, the third stage has emphasized strategic investment and raising of privatization revenue for the state. During these larger cash privatizations, large stakes in medium and large companies were usually privatized through tenders or the stock exchange. The government set criteria that potential investors had to meet if they wanted to purchase company shares. This process of privatization has been slow, with only a handful of large companies privatized to date. While six oblenergos were privatized in 2001, controversies surrounding the process led to stagnation.



### **Results of Privatization**

Over the past decade (1992–2002), more than 100,000 of Ukraine's SOEs were privatized (Table 1). Of these, about 25,000 were central and 55,000 were municipal enterprises. In 2002 alone, these companies employed 3.5 million Ukrainians or 24.2 percent of the country's workforce. More than 10,000 open joint-stock companies were created, and 8,500 enterprises in the agricultural sector were reformed.

Despite the significant economic decline that occurred in the process of transition, privatization in Ukraine has nonetheless contributed positively to creating a market-based economy. Currently, the share of nonstate companies in total production is about 85 percent; they account for 60 percent of the country's total volume of industrial output. Industries that have achieved the greatest success include food, light industry, pulp and paper, and woodworking, where the process of privatization has been virtually completed. In these sectors, growth rates are several times higher than in industry overall. For example, during 2001, when GDP grew by 9.1 percent, the fastest-growing processing industries were wood and wood processing (which grew by 28 percent), machine building (18.8 percent), pulp and paper (18.2 percent), food (18.2 percent), and textiles/apparel (14 percent). In 2002, with GDP growth of 4.1 percent, these industries grew by about 8 percent. In certain industries, such as food, most privatized companies have enjoyed relatively strong financial growth.

In addition to better financial results, the general perception is that the management of these privatized companies has improved since privatization.

### **Social Effects of Privatization**

As noted above, collapse of the former Soviet Union, disruption of pre-1990 economic ties, and lack of economic competitiveness of the SOEs led to a sharp deterioration of Ukrainian companies' financial situation. This, in turn, greatly reduced production volume, which resulted in massive layoffs during 1991–95. It also led to the accumulation of large wage arrears, since many retained workers were paid only partially. Furthermore, many SOE employees worked only on paper—that is, their management requested that they not attend work, and they were not compensated. They remained expectant that they might be recalled to work at some future time, which rarely happened (Appendix A).

High unemployment levels in industry — as much as 30 percent in 1995, according to unofficial estimates — and significant wage arrears forced workers to master new professions, which often required lower-level skills (e.g., doctors and engineers became taxi drivers or salespeople). The phenomenon of hidden employment in the shadow economy appeared at this time, although it already existed in some

form before the breakup of the Soviet Union. During 1992-95, the shadow economy doubled to an estimated 10 million employees. Table 3 provides more recent data on wage arrears and official unemployment, which we believe seriously underestimate the reality of the situation.

**Table 3. Ukraine: Selected Employment Statistics, 1995–2000**

Statistic	1995	1996	1997	1998	1999	2000
Ukrainian Population, at year end (millions)	51.3	50.9	50.5	50.1	49.7	49.3
Number Employed (millions)	23.7	23.72	22.6	22.3	21.8	21.6
Unemployment Rate (percent)						
Officially Registered Unemployment to Employed Population	0.5	1.3	2.3	3.7	4.3	4.2
Application per Vacant Position (number of people)	2	11	20	30	24	17
Wage Arrears (millions of dollars)	n.a.	2,286.8	2,770.8	2,587.7	1,526.2	905.91

Source: State Statistics Committee of Ukraine.

The major reduction in employment that occurred during the 1990s was not caused by privatization. Rather, it was a remnant from the Soviet era — that is, highly inefficient, industrial enterprises — energy, raw materials, and human resources — producing for a declining military demand and unable to compete in a market economy. In fact, studies show that, during the Soviet era, many SOEs created no value (they had negative rates of returns if outputs and inputs were valued at international prices). After independence in 1991, most Ukrainian enterprises were either idle or ran at 10 to 15 percent capacity.

Under these circumstances, a short-term positive outcome of privatization — and thereby the country's transition to a market economy — did not increase employment dramatically; nonetheless, in those firms that successfully restructured, salary levels and productivity improved and wage arrears were reduced. Switching to modern management methods at privatized companies resulted in improved efficiency. Interested owners (investors) stimulated and improved companies' operations, which was reflected in increased employee productivity, better use of labor, and higher average monthly salaries compared to state companies. Tables 4 and 5 provide comparisons for 2000 and 2001, respectively.

As tables 4 and 5 show, in nearly every industry, most privatized companies have higher salary levels than nonprivatized ones. In the metallurgy industry, a sector in which no new enterprises were created over the past decade, privatization caused a significant increase in average monthly salaries. These increases were, in some cases, more than 100 percent higher than preprivatization levels (e.g., in 2001, the average monthly salary at Zaporizhstal was \$182, compared to \$75 in 1998, before privatization). In 2001, the salaries of employees at privatized metallurgical companies were more than 20 percent higher than those of employees at comparable government-owned

companies. In the mining and energy-materials production sectors, salaries at privatized companies were as much as 20 percent higher than those of nonprivatized ones in 2000 and up to 35 percent higher in 2001.

**Table 4. Ukraine: Average Monthly Wages in Selected Industries, 2000 (US dollars)**

Sector	Average	State	Non state
Coke Production and Oil Refining	87.06	41.02	88.70
Electricity, Gas, and Water Production	69.24	64.83	71.61
Food Industry and Processing of Agricultural Products	49.08	41.74	49.74
Light Industry	28.84	20.46	29.08
Machine Building	40.40	38.70	40.88
Metallurgy and Metalworking	74.92	62.46	77.09
Mining	74.12	69.28	82.77

Source: State Property Fund of Ukraine.

**Table 5. Ukraine: Relationship Between Form of Ownership and Average Salary, 2001 (percent)**

Sector	State	Nonstate
Chemicals and Plastics	105	98
Coke Production and Oil Refining	47	102
Electricity, Gas, and Water Production	96	106
Energy Materials Production	92	126
Food Industry and Processing of Agricultural Products	85	101
Light Industry	71	101
Machinery	96	101
Metallurgy and Metalworking	83	103
Mining	93	112
Nonenergy Materials Production	98	101
Other Nonmetal Mineral Products	127	98
Other Production Sectors	101	100
Processing Industry	95	101
Wood Processing, Pulp, and Paper	119	97

Note: Average salary is 100 percent.

Source: State Property Fund of Ukraine.

In general, nonstate companies have significantly outperformed state companies in terms of both productivity and resolution of wage arrears. Lower level of arrears is a significant factor in employees' ability to support their families and general well-being. Wage arrears have long been a problem in the public sector — for example, many teachers and miners must wait several months to receive their salaries. In Table 6, this differential is even more apparent. For example, in the mining industry, the average arrears in the private sector are more than two times less than in the public sector. In only two industries — metallurgy and light industry — is a difference in this trend not significantly different. This may result from those sectors' small sample of state companies remaining to be privatized.

A margin analysis of sales and costs of Ukrainian companies provides a similar view of the economic efficiency of state ownership versus fully privatized companies. In 2001, fully privatized enterprises showed better profitability than SOEs (Table 7). Moreover, fully privatized companies paid higher taxes than SOEs, which potentially benefitted the citizens of Ukraine.

**Table 6.**  
**Ukraine: Labor Data, Showing Form of Ownership by Sector, 2001**

<b>Sector/Form of Ownership</b>	<b>Companies (number)</b>	<b>Employees on Payroll (number)</b>	<b>Labor Productivity (one thousand UAH per person)</b>	<b>Average Wage Arrears (number of months)</b>
<b><i>Chemical and Petrochemical Industry</i></b>				
Total	2,785	217,482	57.12	1.28
State	70	57,075	51.87	1.80
Nonstate	2,715	160,407	58.99	1.10
<b><i>Electricity, Gas, and Water Production</i></b>				
Total	1,731	537,810	49.80	1.01
State	1,071	255,611	46.44	1.19
Nonstate	660	282,199	52.83	0.87
<b><i>Energy Materials Production</i></b>				
Total	432	439,363	34.06	3.01
State	258	372,006	26.65	3.30
Nonstate	174	67,357	74.96	1.92
<b><i>Food Industry and Processing of Agricultural Products</i></b>				
Total	8,586	54,872	56.80	0.96
State	278	42,199	37.73	1.05
Nonstate	8,308	500,673	58.41	0.95
<b><i>Light Industry</i></b>				
Total	4,287	254,620	11.99	1.33
State	129	4,355	16.14	1.10
Nonstate	4,158	250,265	11.91	1.33
<b><i>Machinery</i></b>				
Total	10,039	976,189	22.55	1.84
State	372	196,438	16.64	2.60
Nonstate	9,667	779,751	24.04	1.65
<b><i>Metallurgy and Metalworking</i></b>				
Total	2,733	456,308	81.01	0.95
State	80	69,591	86.77	0.90
Nonstate	2,653	386,717	79.97	0.96
<b><i>Mining</i></b>				
Total	990	592,863	36.64	2.47
State	325	412,874	27.44	3.05
Nonstate	665	179,989	57.75	1.34
<b><i>Nonenergy Materials Production</i></b>				
Total	558	153,500	44.02	0.87
State	67	40,868	34.56	0.96
Nonstate	491	112,632	47.46	0.84
<b><i>Processing Industry</i></b>				
Total	42,704	2,951,964	42.92	1.26
State	1,932	405,513	36.49	1.70
Nonstate	40,772	2,546,451	43.94	1.19

Source: State Statistics Committee.

**Table 7. Ukraine: Margin Analysis, 2001 (percent of net sales)**

Ownership Type (100 percent)	State	Privatized
Net Sales (percent)	100	100
Cost of Goods Sold	88.7	77.6
Gross Income/ Loss	11.3	22.4
Operating Income	3.9	12.9
Other Expenses/ Income	0.9	-1.3
Pretax Income	4.8	11.7
Extraordinary Revenues/ Costs	1.2	0.0
Taxes	-0.9	-3.9
Net Income/ Loss	5.2	7.8

Source: State Statistics Committee.

### Conclusions<sup>3</sup>

The first stage of privatization in Ukraine was particularly difficult. Even though most companies were sold to employees, their backing came from a small circle of wealthy managers. Certain companies privatized with such consolidated ownership control did well. Conversely, few companies with broad employee ownership succeeded; many businesses privatized in this way did not improve until wealthier managers or backers took over, generally forcing many people out of work.

During the second stage, Ukrainian mass privatization attempted to implement a social-equality model. All citizens — from the very young to the elderly — had an opportunity to purchase state-run companies through a system of auctions. However, as the legislative and normative base of privatization lacked depth, not all levels of the population had equal opportunity to participate.

Because of hyperinflation, income instability, and the general economic contraction that Ukraine experienced through 1999, many privatized companies were sold for relatively small amounts. Through this process there arose powerful industrial groups and other regional players — the so-called oligarchs — who began to control significant segments of the Ukrainian economy.

Throughout the entire process, owners were not as numerous as had been hoped. On the other hand, companies with concentrated ownership were more likely to restructure and turn their businesses around. This, of course, resulted in greater social improvements and individual benefits. Therefore, in many industries, concentrated ownership has largely accounted for short-term improvements in

<sup>3</sup> These conclusions represent the view of the authors and all staff of The Bleyzer Foundation and SigmaBleyzer Corporation. These views may be regarded as biased since SigmaBleyzer has been an active participant in the privatization process. The authors are certain, however, that this interpretation is shared by many other economic observers and private-sector actors.



firm performance. We hope that this will eventually lead to improved social welfare.

Our overall assessment of the Ukrainian privatization model during the second stage is mixed. On the positive side, 70,000 SOEs were privatized during 1995-98, which helped to create a private-sector, market-oriented economy. On the negative side, the process was not transparent. Percentages of large companies were often sold at excessively discounted prices. Moreover, purchasers rarely had the company's best interests at heart; rather, they were more interested in stripping assets or damaging competitors, and new owners did not always understand the businesses they had purchased.

In addition, the process was protracted. Such countries as Hungary and the Czech Republic, which privatized faster, were clearly at an advantage. Ukraine took more than a decade to reach a level that other countries achieved in less than half the time. This resulted in a time delay between the act and results of privatization. Only in the past few years have companies begun to show positive results, which have contributed to three years of positive GDP growth: 5.9 percent in 2000, 9.1 percent in 2001, and 5.2 percent in 2002 (Appendix B). The attempt to equitably distribute state property through vouchers failed to achieve the anticipated results, and the method was costly in terms of promoting efficiency and growth.

It is still too early to evaluate results of the third stage of privatization. The Ukrainian government has focused more on helping the fiscal budget by making money from privatization and less on transforming the economic environment through privatization. While the government needs additional revenues to improve its citizens' quality of life, we are of the opinion that this goal could have been reached quicker by creating healthier and more profitable privatized businesses, thereby bringing in more tax revenue, rather than having attempted to maximize privatization proceeds in an environment unfriendly to investors. This accelerated privatization approach would have resulted in higher economic growth, additional jobs, and a significantly improved economic situation for Ukrainian citizens.

Despite the above problems, we believe that privatization was an important factor in improving the welfare of the Ukrainian people. Quality of life for employees at privately owned companies improved. Salaries at these companies increased and were more likely to be paid on time, an important characteristic considering the high levels of inflation during those periods. In addition, privatized companies paid higher taxes, thereby enabling the government to use larger revenues to provide Ukrainians badly needed services.

## A View from the Private Sector: SigmaBleyzer

SigmaBleyzer, a leading investment bank in southeastern Europe, has operated in Ukraine for more than a decade. The company participated in all stages of privatization and postprivatization; at one time, its portfolio included more than 85 companies representative of most industrial sectors across all regions of Ukraine. Today, the firm manages three funds, working with a portfolio of more than 60 companies. Portfolio diversification and consolidation have resulted from an in-depth analysis of the Ukrainian economy at both the macro and micro levels.<sup>4</sup>

The first years of transition in Ukraine were characterized by a sharp decline in production volume. Most Ukrainian enterprises were either idle or running at 10 to 15 percent of capacity-use levels. Official statistics did not reflect levels of unemployment since many people registered as employed were, in reality, on indefinite leave without pay. However, this situation led indirectly to the positive effect of privatization. Since efficient management of joint-stock companies had not yet evolved, the most active workers on leave-without-pay created their own small businesses, often remaining officially employed by privatized companies. Most of these employees never returned to the parent firm.

Deterioration of official employment, which continues in certain government-owned companies today, was not directly caused by privatization. As mentioned above, it was a remnant of Soviet-era inefficiencies, when production was oriented mainly to the military-industrial complex. At the time of transition, companies suddenly had to change their focus to new customers (primarily consumers), and most had no experience in doing so. Most were inefficient in production and energy consumption, had to recreate supply chains, and suffered severe disruptions in trade. These combined factors put tremendous pressure on companies trying to transition to a market economy.

Several cases in the portfolio of Ukrainian Growth Funds (UGF) highlight how privatization has helped both companies and social welfare. These cases, discussed below, are the

- Sevastopol Shipyard (SSY Company),
- Poltava Confectionery, and
- Berdyansk Agricultural Machinery and Melitopol Tractor Hydro Units Plants.

<sup>4</sup> Using its financial expertise and international contacts network, SigmaBleyzer has helped implement Western management practices, attracted venture capital, advised on restructuring, assisted the transition to International Accounting Standards (IAS), implemented modern information systems, developed strong marketing and sales capabilities, and bought and sold shares in its target companies in Ukraine. In 2001, it created The Bleyzer Foundation, an international nongovernmental organization (NGO) that promotes private-sector development and best practices in developing government policies in Ukraine and other transition countries. A prime objective is to create capital-friendly business environments and assist in promoting improved quality of life for the people of Ukraine and the region.

### Sevastopol Shipyard

The SSY was significantly transformed by privatization. Established in 1783, the SSY was originally charged with building and repairing naval vessels on the Black Sea. Located in the port city of Sevastopol on the Crimean peninsula, SSY enjoys a favorable climate and protected bays that allow it to work year round. For most of its history, the Shipyard catered mainly to the military, producing and repairing military vessels. Today, SSY has shifted its focus to commercial orders.

SigmaBleyzer acquired relative control (and the largest stake) of SSY in 1998, when it increased its previous holdings to 47.4 percent. It acquired an additional 2.8 percent the following year, bringing its total to 50.2 percent. During this time, military ship-repair contracts could not be relied on since both Russia and Ukraine lacked sufficient resources to pay for such repairs. Before privatization, SSY had tried and failed to attract a significant number of commercial customers to its docks. The company was in crisis and desperately needed restructuring.

Before 1998, the Ukrainian government — majority owner and manager of SSY — had split the company into 39 companies. This action was not based on analysis; each department was simply established as a separate company. This resulted in companies within SSY misallocating and misusing resources, paying extra value-added tax (VAT) payments, and causing general chaos. In addition, the company had not developed a Western-style marketing function.

**Table 8. Ukraine: Key data for Sevastopol Shipyard, 1996-2001**

Item	1996	1997	1998	1999	2000	2001
Net Sales (millions of dollars)	9.40	12.70	12.81	11.28	14.62	18.06
Net Income (millions of dollars)	-1.50	-0.80	0.80	0.76	0.52	1.70
Port Cargo Loaded (tons)	n.a.	176	146	263	705	790
Ships Repaired	n.a.	7	8	25	44	47

Source: Sevastopol Shipyard Company.

SSY also had organizational problems. For example, when a ship enters a repair yard, the industry norm is to assign a single foreman as the company representative to oversee all aspects of the repair. This person acts as a focal point for the customer. At SSY, several representatives of the 39 subcompanies vied for control to ensure their individual parts were completed, without caring about the overall product or customer. Not surprisingly, delays in job delivery were frequent, causing customers to develop a negative opinion of the company; as a result, sales plummeted. At the end of 1997, the last full year under government control, SSY posted revenues and net income of \$12.7 million and -\$0.8 million, respectively.

After privatization, a project team was assembled to lead the company out of crisis. Western experts were brought in to make key

recommendations on how to improve and restructure the company. These included Libis Engineering, Ltd.; Naval Architects & Marine Consultants; Pricewaterhouse-Coopers; Thunderbird Corporate Consulting; Barrents Group (United States Agency for International Development program); and Citizen Development Corps. Such expertise was often relatively inexpensive — sometimes free under grants from bilateral institutions — and easy to find; yet, government managers had made no attempt to do so. In addition, a team of SigmaBleyzer restructuring experts was assigned to live and work in Sevastopol.

Working with external experts, a plan was developed to divide the company into five profit centers. New controls were put into place to gain a handle on the business. A strategic decision was made to focus on ship repair and the port and to abandon floating cranes (because of high capital outlays and low demand). A full market analysis of the region was carried out, and a professional marketing department was created. Modern systems to control work progress were installed. The company began to focus on customer needs — pricing, delivery time, quality, and services — which it had previously ignored.

Best practices of Western shipyards were adopted for use at SSY. Examples included attracting agents, visiting owners, conducting exit interviews with ship owners, establishing an estimate department, and facilitating yard visits with potential clients. Small investments were targeted, most of which came from internal funds.

All of these changes, which the government had been unable to achieve over the previous five years, occurred within two years. As a result, by 2001, revenues had increased 43 percent, net income increased to \$0.8 million, port volumes increased 349 percent, the number of repaired ships grew to 44 (523 percent), and debts (salary, payments to the government, and social insurance) decreased from \$7.91 million to \$1.44 million (tables 10.8 and 10.9). Without these changes, the company would most likely have gone bankrupt.

These changes not only improved the overall condition of the company; they also helped city employees and residents. The city and central government received nearly \$6.5 million in back payments, and profit tax payments increased by about 75 percent. The Value Added Tax (VAT) would have increased were it not for company restructuring and special laws freeing SSY from part of the burden. From 1997 to 2001, average salaries doubled (from \$48 to \$96). This salary of \$96 was more than 50 percent higher than the average for the city of Sevastopol and Ukraine overall (State Statistics Committee).

As Table 9 shows, from 1997 to 2001, the number of workers decreased by more than half (from 7,352 to 3,330). To reiterate, the causes were structural problems that originated during the Soviet era. Furthermore, in 1997, many official employees neither reported

to work nor received salaries. Those who did go to work on a daily basis and received a steady salary numbered 2,880 in 1980, when SigmaBleyzer took over the company. As of 2001, this number had increased to more than 3,330, reflecting the company's improved performance and competitiveness (Appendix A).

**Table 9. Ukraine: Selected Comparison Data for Sevastopol Shipyard, 1997 and 2001**

Year	Average Monthly Salary (dollars)	Net Revenue per Employee (dollars)	Number of Employees	VAT Payment (thousands of dollars)	Profit Tax (thousands of dollars)
1997	48	1,728	7,352	1,592	497
2001	96	5,424	3,330	1,319	861

Source: Sevastopol Shipyard Company.

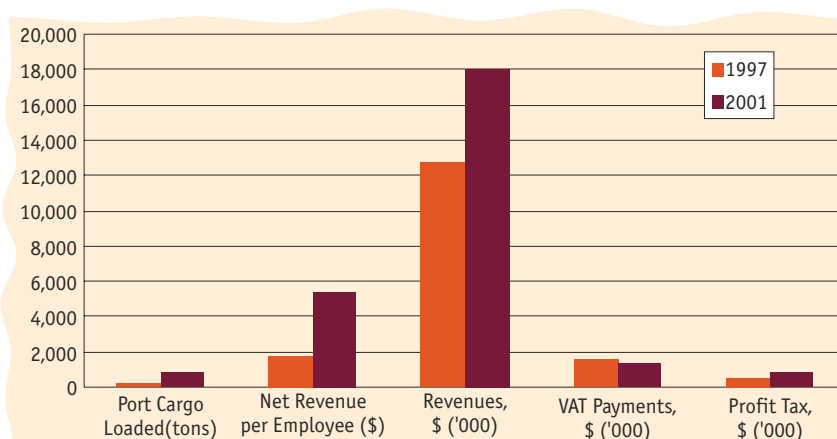
Finally, local officials have made a 180-degree change in attitude toward the benefits of private ownership. When SigmaBleyzer initially took control of the Shipyard, city officials were both aggressive and aloof. They believed that SigmaBleyzer should immediately create more jobs and supply more investment. However, as the Shipyard began to function more profitably, they saw that investments were beginning to flow more regularly (from profits) and that the demand for employment also rose to meet company needs (Figure 1).

Today, SSY has a good working relationship with regional officials, who have come to appreciate the large tax base, employment base, and revenue that the company can generate for local businesses. In Sevastopol, more than 350 small- and medium-sized businesses employ workers and pay taxes, in part because SSY is successful — that is, these companies' existence and success are directly tied to SSY's success and improvement. They provide products or services that the Shipyard uses to meet its clients' needs. These include ship-design studios, architectural firms, machinery shops, cargo movers, parts suppliers, marine companies, agents, subcontractors, and other businesses that depend on the company's continued success. Although employees of these businesses may no longer work for SSY directly, they are gainfully employed by healthy, tax-paying enterprises that create value by working with SSY.

The financial results of these other small businesses are not known; however, it is clear that they rely heavily on demand from SSY. Increased port activities — to approximately 800,000 tons of cargo in 2001 — has generated significant revenues for customs authorities and railroad movers (Figure 1). The English-language summer camp created at the SSY resort attracts more than 800 children and 1,200 other guests per year, bringing more spending to the region. This generates a greater tax base for the city, more employed citizens, fewer expenditures on social services, increased revenue from public transportation, and an overall increase in consumer spending.



**Figure 1. Ukraine: Key Data from Sevastopol Shipyard, 1997 and 2001**



Sources: Sevastopol Shipyard Company and SigmaBleyzer.

Could this turnaround have occurred under government control? We do not believe so. First, the government did not understand SSY's problems or how to correct them. In fact, their remedy nearly destroyed the business. Second, the government lacked the contacts and inclination to involve Western expertise, a crucial element in the turnaround. Third, if restructuring had been government led, it would have become highly political and not optimal for SSY. Fourth, SSY lacked a marketing function, a crucial bit of know-how that previous government owners had failed to understand or acquire.

### Poltava Confectionery

Privatization of controlling stake in Poltava Confectionery — producer of chocolates, biscuits, caramel, and other candies — was a key event in the company's life. State-owned until 1996, Poltava showed continuing declines, producing only 4,921 tons of confectionery products that year (it had produced about 20,000 tons in 1990). In 1996, managers acquired control of the company. SigmaBleyzer bought a controlling majority three years later. Since then, growth has been phenomenal (Tables 10 and 11).

Through improved performance, Poltava Confectionery has improved the welfare of Poltava's citizens. More people are employed, tax payments have increased, and salaries have risen. According to management, Poltava Confectionery was one of the city's top five taxpayers in 2001. This would not have been possible without increased revenues and profitability at the Confectionery (Figure 2).

**Table 10. Ukraine: Annual Results for Poltava Confectionery, 1996–2001**

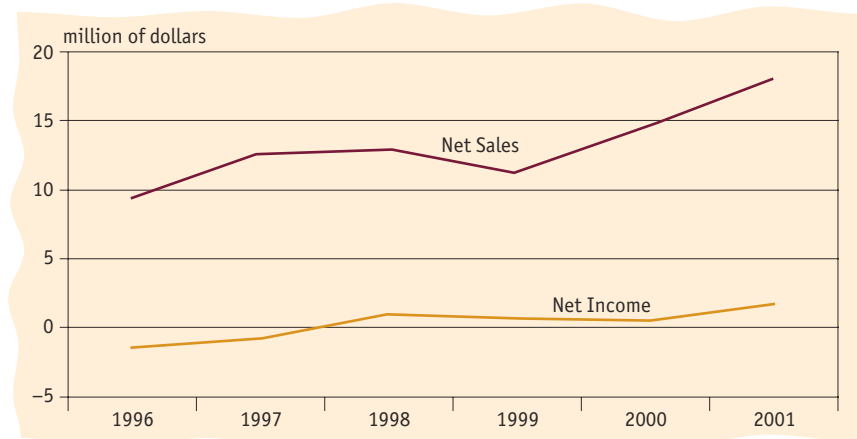
Item	1996	1997	1998	1999	2000	2001
Net Sales (millions of dollars)	7.16	9.84	11.14	13.35	15.35	20.36
Net Income (millions of dollars)	1.03	1.28	1.09	1.18	1.23	1.37
Production Output (tons)	4,921	7,110	9,160	15,970	19,540	21,820

Source: Poltava Confectionery.

**Table 11. Ukraine: Selected Comparison Data for Poltava Confectionery, 1997 and 2001**

Year	Average Monthly Salary (dollars)	Net Revenue per Employee (dollars)	Number of Employees	VAT Payments (thousands of dollars)	Profit Tax (thousands of dollars)
1997	60	13,526	987	1,555	560
2001	84	14,330	1,421	2,735	665

Source: Poltava Confectionery.

**Figure 2 Ukraine: Poltava Confectionery Results, 1996–2001**


Source: Poltava Confectionery.

At the end of 2002, the company completed a \$4 million investment project in a new confectionery facility that should produce an additional 60,000 tons of confectionery products. All construction was done locally, which supported several construction, electrical, and other local companies, as well as suppliers of parts and construction materials. More importantly, Poltava plans a threefold increase in sales over the next few years, which will produce more jobs, higher wages, and increased tax payments. While these wage and tax increases have reduced the ratio of net income to sales, they have resulted in general improvement of the community.

### **Berdyansk Agricultural Machinery and Melitopol Tractor Hydro Units Plants**

In 1998-99, SigmaBleyzer bought controlling stakes in Berdyansk Agricultural Machinery and Melitopol Tractor Hydro Units Plants. This led to both plants' economic turnaround and 1999-2001 restructuring, the main changes of which are described below.

Berdyansk produces agricultural machinery, including grain and grain/legume reapers; tractor-mounted mowers, balers, and cultivators as well as some 200 spare parts for agricultural machinery (particularly harvesters). When privatized, the company was operating at only 30 percent capacity due to lack of demand. Historically, about 80 percent of Berdyansk's sales were exports to Russia and Kazakhstan; however, this trade was disrupted after the breakup of the Soviet Union, leaving

the company headed for bankruptcy. The reconstruction plan included concrete measures for tapping into new markets, recovering sales to Russia and Kazakhstan, and reducing unit-material consumption, labor costs, and power consumption. Berdyansk also undertook major restructuring of its facilities to improve production efficiency. All useful equipment — particularly welding and assembly — was relocated from many sites (which were scrapped) to only one. In addition, the company outsourced certain uneconomical activities, such as its foundry. While the company still faces difficulties, it is experiencing a turnaround, with increased sales of 11 percent (in US dollars) over the last two years.

The Melitopol Tractor Hydro Units Plant was once the former Soviet Union's largest producer of hydraulic parts for tractors and other farm equipment; its production included hydraulic distributors, cylinders, and steering units; shock absorbers; clutches; differential blocking sensors; electro-hydraulic distributors; and pressure-sensitive valves and hoses. Plant customers included 200 assembly plants and more than 200 machinery-repair shops. Since the breakup of the Soviet Union, many of these companies have been working at a small fraction of their previous output levels, greatly reducing the potential size of Melitopol's market. Before privatization, lack of demand resulted in the company cutting its workforce from 10,000 to 2,200. The rehabilitation plan included an aggressive program to find customers both within and outside Ukraine. As a result, exports are now principally directed toward Russia, Italy, France and the United States. In addition, various cost-reduction programs were introduced to lower operating costs. During the first stage, the plant focused on the manufacturing of spare parts to serve the large stock of older tractors in countries of the former Soviet Union. It also reduced costs by scrapping unneeded equipment and concentrating production facilities in a few areas. Consequently, since 1999, Melitopol has been able to increase annual sales (in US dollars) by 8 percent (Table 12).

**Table 12. Ukraine: Net Sales of Two Companies in the UGF Portfolio in selected years (thousands of dollars)**

Company	1999	2000	2002
Berdyansk Reapers	3,635	3,417	3,798
Melitopol Tractor Hydro Units Plant	2,865	3,128	3,624

Source: Company financials.

At the time of privatization, Berdyansk and Melitopol were significantly indebted (Table 13), had decreasing sales and production volumes, were having difficulty finding customers, and appeared headed for bankruptcy. However, as Table 12 shows, by 2002, both companies had rebounded; the 2002 figures show how quickly the companies improved after the restructuring plans were implemented.

## Reduction in Government Debt and Back Wages

SigmaBleyzer companies have been able to pay off or significantly reduce their debts to the government and wage arrears to employees (Table 13). From 1997 to 2001, SigmaBleyzer companies had a 94 percent drop in unpaid debts to the government and an 80 percent drop in unpaid wages to employees. Clearly, the improved situation with wage arrears has been a key reason for employees shifting from the public to the private sector. The wage-arrears problem in Ukraine has been documented for some time. As shown in Table 6, the backlog has generally been higher in the public, rather than private, sector. Thus, the private sector has done a better job at improving the welfare of its employees than has the state.

Repayment of wage arrears by private companies has been an important social and psychological issue of the postprivatization period. As the most acute social consequence of the financial crisis, wage arrears created a psychologically tense atmosphere. This often created a negative attitude toward the privatization process, even though wage arrears in SOEs were equal to or greater than those in most privatized firms. While poorly regarded by the public, the postprivatization concentration of equity and subsequent formation of corporate management ensured the appearance of efficient owners and management bodies controlled by joint-stock companies.

As Table 3 shows, wage arrears increased until 1997, and then fell in 1998, with major declines in 1999 and 2000. From 1997 to 2000, wage arrears fell by more than 50 percent to less than \$1 billion (State Statistics Committee). This decrease is significant since most concentrated private owners took control only in 1997–99. Therefore, results in the reduction of wage arrears appear to have directly followed these privatization events.

**Table 13. Ukraine: Debts of UGF Portfolio Companies, 1997 and 2001  
(thousands of dollars)**

Company name	Government debts		Wage arrears	
	1997	2001	1997	2001
Central Ore Mining	8,654	881	2,152	755
Chimik	54	9	21	5
Conditioner	678	523	207	187
Dneporazot	2,020	1,533	5	373
Kharkiv Machine-Building Plant (Svitlo Shakhtarya)	1,018	63	432	62
Khartsyzsk Pipe Works	6,214	241	4,176	1,109
Kherson Combines	192	847	870	1,017
Kyiv Refrigerator #2	16	18	59	33
Makiivka Pipe Rolling Plant	408	80	179	337
Marganets Repair	1,107	6	505	17
Mariupol Illicha Steel	9,551	1,809	3,625	4,224
Markokhim	5,135	615	145	102
Melitopol Compressor Plant (data for 2000)	910	468	583	69
Melitopol Tractor Hydro Units Plant	865	10	527	152
Nikopol Pipe	208	61	226	11
Northern Ore Mining	295,650	876	52,417	1,232
Ordzhonikidze Ore Mining (data for 2000)	5,788	801	2,654	408
Pershotravnevy Agricultural Machinery Plant (Berdyansk Reapers)	1,387	177	864	132
Poltava Confectionary	86	50	42	123
Poninka Paper Combine	408	258	179	235
Rosava Tires	17,008	7,903	1,105	79
Sevastopol Shipyard	1,952	375	3,880	728
Slavyansk High Voltage Insulators	933	20	557	29
Zaporizhstal	4,055	3,372	3,074	1,995
Zaporizhya Meat Processing	43	15	51	35
Zhydachiv Pulp and Paper Combine	320	54	469	178
<b>Total</b>	<b>366,657</b>	<b>23,066</b>	<b>81,001</b>	<b>15,628</b>

Source: Company financials and SigmaBleyzer.

This result was clearly part of the government's strategy as well. In most third-stage privatizations, the government generally stipulated two aspects of the transaction: (1) purchase price and (2) debt payments. Naturally, buyers pay less for the company, knowing that they must then pay off inherited debt. A good example is the Okean Shipyard, which was privatized in 2000. Before privatization, the company had suddenly increased long-term debts to \$8.7 million (these had fluctuated within a range of only \$0.6 to 0.8 million during 1995-97). When Damen Shipyards purchased a 78 percent stake in 2000 — at that time, SigmaBleyzer already owned nearly 9 percent — it paid approximately \$4.8 million. However, according to the agreement, it



paid an additional UAH 8 million (\$1.5 million) for unpaid salaries and debts to the government. This provided immediate support to both public services and the local community, which would never have occurred without privatization.

## Conclusion

Privatization has played a key role in improving the welfare of Ukraine's people. Wages have increased, debts have been reduced, communities now receive more money from successful companies, and more small- and medium-sized companies have sprung up to support larger privatized companies. Overall, privatized companies have enjoyed growing support from most regional or city leaders as taxable income has increased and more people have become employed.

The first two stages of privatization were not carried out transparently enough, and too much wealth was concentrated in too few owners. We believe these events limited the full positive effect that privatization could have brought. However, the most recent phase of privatization has been better at providing a more transparent form of transaction. Such a trend must continue.

The pace of remaining privatizations must be significantly accelerated. Objections by government officials are based on their assertion that they cannot receive fair prices in the current environment. Our response is that it is up to the marketplace to determine fair prices; waiting may result in even lower, not higher, prices. The best way for the Ukrainian government to maximize returns from privatization is to do all it can to improve the country's business and investment environment.



## Appendix A

### Data Challenges

The former Soviet Union poses a significant challenge to evaluating the validity of data on a company level, especially when comparing companies across time periods. The planned economy under the Soviet government was the prime driver for building companies, allocating their expenses, creating a supply chain, and stimulating demand. When this system broke down, many companies could not sustain the business on their own and failed. Others looked to the government to continue supporting them, either directly or indirectly. A few began to survive on their own.

Current data of privatized companies is somewhat more reliable, certainly more so than a decade, or even two years, ago. However, older data is subject to significant doubt, as the case of the Sevastopol Shipyard illustrates. In 1990, SSY had 15,700 workers, with sales of \$30.2 million; by 2001, it had 3,609 workers, with revenues of \$18.1 million.

The authors believe that these numbers do not reflect a workforce reduction of more than 75 percent. First, these numbers include so-called phantom workers — that is, official statistics did not reflect the level of unemployment since many registered as employed were on indefinite leave without pay. Thus, they stayed on the company's list as employed, while finding work elsewhere. Second, since everyone under the Soviet system was required to work, companies were not set up to use their employees efficiently, and many workers performed useless tasks. As spending was rationalized, it was clear that many employees were not needed or performed work that another employee could have easily added to his or her workload. This also explains why production per employee often increased radically. This phenomenon was typical of most companies before privatization, especially during the Soviet era.

Third, many employees supported government-funded municipal services, such as public housing, schools, and hospitals. Following transition and collapse of the old system, company sales could no longer support such expensive public works; thus, they were forced to transfer these services back to local governments (this was true of both state and privatized firms). Finally, certain services were spun off or sold off, including company resorts and other businesses outside the company's core competencies.

Net sales revenue from 1990 is also suspect since it was under a command economy, with only internal clients provided by the government (thus, the comparison is not particularly helpful). With loss of government orders, revenues and income at most companies declined significantly. The disruption of supply chains forced companies to become

more competitive, something for which they were unprepared and often failed to achieve.

Experience shows that other numbers have either been inflated or reduced in order to make the company look better or worse, depending on need.

Today, many companies do everything possible to reduce net income to \$0 in order to avoid taxes, and the law still provides latitude for doing so. This practice should diminish as the government continues to institute Generally Accepted Accounting Principles (GAAP) and IAS rules.

Therefore, all of these numbers should be viewed somewhat skeptically. At the same time, while the numbers may differ, trends still point to the same conclusions. Anecdotal evidence in our portfolio companies indicates that most companies improved their situations dramatically after privatization.

**Appendix B**
**Key Economic Data for Ukraine, 1996–2002**

Statistic	1996	1997	1998	1999	2000	2001	2002
<b>GDP</b>							
Real GDP (percent)	-10.0	-3.1	-1.9	-0.4	5.9	9.1	5.2
GDP (UAH billion)	82.0	93.0	103.0	130.0	170.0	202.0	221.0
GDP/capita (US dollars)	870.0	856.0	828.0	612.0	555.0	775.0	859.0
Savings (percent GDP)	20.0	19.0	18.0	22.0	20.0	20.0	22.0
Investments (percent GDP)	23.1	21.5	20.7	17.4	18.6	20.4	18.9
Industrial Growth Rate (percent)	-5.1	-0.3	-1.0	4.0	12.4	14.2	7.0
<b>Public Finances (percent GDP)</b>							
Fiscal balance	-4.9	-6.6	-2.2	-1.5	0.6	-0.4	0.7
Revenues	37.0	30.0	28.0	25.0	29.0	27.0	28.0
Expenditures	42.0	37.0	30.0	27.0	28.0	28.0	27.0
<b>Monetary Statistics</b>							
Consumer Prices (percent YOY)	39.7	10.1	20.0	19.2	25.8	6.1	-0.6
Monetary Base (percent YOY)	38.0	45.0	22.0	30.0	40.0	37.0	33.6
Money Supply-M3 (percent YOY)	45.0	045.0	25.0	25.0	45.0	42.0	42.0
Exchange Rate (UAH/dollar)	1.9	1.9	3.4	5.2	5.4	5.3	5.3
<b>Balance of Payments (billions of dollars)</b>							
Goods Exports	15.5	15.4	13.7	12.5	15.7	16.3	18.7
Goods and NFSE	20.3	20.4	17.6	16.2	19.5	21.1	23.4
Goods Imports	19.8	19.6	16.3	12.9	14.9	15.8	18.0
Goods and NFSI	21.5	21.9	18.8	15.2	17.9	20.5	21.5
Trade Balance	-4.3	-1.5	-1.2	1.8	1.5	0.6	0.7
Current Account Balance	-1.2	-1.3	-1.3	1.7	1.5	1.4	3.2
Direct Investments	0.5	0.6	0.7	0.4	0.6	0.8	0.8
Gross Reserves	1.9	2.3	0.8	1.1	1.7	3.2	4.4
<b>Public Debt (billions of dollars)</b>							
External Debt	8.8	9.6	11.5	12.5	10.3	9.8	10.2
External Debt Service	1.2	1.2	1.8	2.0	1.7	0.3*	1.4
Domestic Debt	1.3	4.6	3.7	2.9	3.8	4.0	4.0

NFSE = nonfactor services exports

NFSI = nonfactor services imports

YOY = year over year

\*. Direct public external-debt service.

Source: SigmaBleyzer, Ukraine: Economic Situation and Reforms in 2001 (April).