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ECONOMIC COLLAPSE, POVERTY, AND INEQUALITY DURING UKRAINE'S DIFFICULT TRANSITION

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Official Exchange Rates of the Karbovanets (1992-1995) and the Hryvnia (1996-2002), Ukraine (average for period)

Year	Per 100 US\$
Karbovanets (Krb.)	
1992	208.00
1993	4,539.00
1994	31,700.00
1995	147,307.00
Hryvnia (UAH)	
1996	182.95
1997	186.17
1998	244.95
1999	413.04
2000	544.02
2001	537.21
2002	532.66

Source: National Bank of Ukraine, www.bank.gov.ua

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EXECUTIVE SUMMARY

The transition process in Ukraine has been very painful, involving a sharp economic collapse, a significant increase in inequality, and hence a major rise in poverty. After a full decade of stagnation, growth returned from 2000 to 2002 and hopes have risen that the country has turned the corner.

On the eve of the country's independence, prospects for successful transition to a market economy seemed bright because of Ukraine's strong industrial and agricultural resource base combined with a highly educated population. Despite these outwardly favorable conditions, however, Ukraine has been one of the poorest performers among the countries in the process of transition away from the former central planning system. This result is blamed on a combination of a sluggish reform process, negative exogenous shocks, and a high level of corruption. An intractable political setting in which there has been strong opposition to the transition from powerful groups has contributed directly and indirectly to the slowness, the lack of coherence, and the corruption associated with the process.

The depth of the post-reform economic decline remains a matter of debate because official figures on the performance of the economy are misleading and much depends on the inevitably imprecise estimates of the changing size of the unofficial (that is, underground or unregistered) economy. Any discussion of what has gone wrong and what has gone right must begin with an attempt to sort out the question of what has happened to the economy, to income levels, to inequality, and to poverty.

In the initial period of independence, massive shortages appeared when the state regulated prices at artificially low levels; when prices were liberalized in 1992, prices took off into hyperinflation. It took some time to bring inflation under control, and the economy shrank sharply during this process. The unofficial sector expanded rapidly, as far as can be judged, so true gross domestic product fell less (probably 35-45 percent) than the official figures indicate (60 percent). Since 2000, the economy has rebounded, with growth of about 20 percent through 2002, according to official figures.

There was a large net increase in inequality over the 1990s. This contributed, along with the considerable fall in average income, to a dramatic increase in poverty. The precise record on the evolution of poverty during the 1990s remains ambiguous, pending further in-depth analysis and attempts to reconcile the various sources of information. Over the recent growth period, the data point to nearly constant consumption distribution and hence falling poverty incidence, suggesting that growth has been at least modestly pro-poor.

A lack of governance spawned a slow and in many ways ineffective reform process in Ukraine. An underlying cause has been the division of political power among reformers, anti-reform Communists, and rent-seeking opportunists. This division has contributed to an erratic reform process and to weak implementation. It is unclear whether a sequencing of reforms could have been designed in such a way as to prevent the extreme levels of corruption that have emerged. Another deterrent to rapid progress toward reform is the institutional inertia of the former command economy, which leads to the maintenance of

many policies that are counterproductive in the context of a market economy, including a dense network of regulations and an oversized group of bureaucrats in charge of them.

The Ukrainian system of social safety nets has been modestly successful in alleviating poverty but at the same time seriously inefficient, in terms of the degree of leakage to the non-poor through lack or poor targeting and in terms of internal inefficiency in program delivery. An important pro-poor decision was the Soviet one to make sure that any family wishing to have a household plot for the production of food items would get it, and the subsequent expansion of the size of those plots in Ukraine over the 1990s. This helped keep rural incomes at or even above the level of urban incomes through the mid-1990s and undoubtedly prevented or ameliorated much poverty.

The objective of moving from a large-scale state and collective farm system (complemented by small household plots) to a system of individual family farms has made only modest progress, both because of strong opposition from some quarters (the Communist and opportunistic groups) and because, institutionally, the distance is long from the one system to the other. The process runs the risk of creating something closer to a Latin American style *latifundia-minifundia* system of land concentration than a more egalitarian family farm system. The closer it comes to the former, the more anti-poor will the agricultural evolution have been.

The non-agricultural SME sector is expected to play an important role in transition economies such as Ukraine. This role is similar to that sought in many other developing countries, but the benefits from a rapid growth of a healthy SME sector are likely to be greater in these transition economies than in most market-oriented developing countries. At the same time, the impediments to such healthy growth are more numerous and more severe. The challenge of SME development in Ukraine is parallel to that of small agriculture: moving away from a command economy built on large enterprises by encouraging new entrepreneurs and developing the markets and other elements of the support system that make the SME sector flourish. SMEs currently account for a majority of non-agricultural employment, and their share has been rising. The years since 2000 provide the first test of how enterprises will react to macroeconomic growth. In 2000, there was rapid growth of value added by firms of all sizes, but whether this growth will be sustained after the Ukrainian economy moves beyond the recovery phase remains to be seen. SMEs, like other firms, complain vigorously about the high rates and complicated and unstable structure of taxes and the excessive regulation intertwined with serious levels of corruption and bureaucratic inertia.

There is an important debate about the source of the recovery since 1999. Some observers credit the last set of reforms (in 1999-2000); others, the good crops; and others, the return of some positive inertia after the economy finally hit bottom. The most persuasive view, we believe, is that the accidental devaluation of the hryvnia relative to other currencies than the Russian ruble (accidental in that it was the result of Russia's financial crisis in 1998) provided a major and general stimulus to the production of tradables (both exports and import competing goods). This stimulus was complemented by a substantial underutilization of capacity. Further analysis is required to identify the relative importance of this factor and of each of the others. Which of them have in fact played the key roles in the turnaround has

important implications for the appropriate course of economic policy in the future, both in Ukraine and in other reforming countries.

While the dearth of relatively accurate data has not prevented our concluding that Ukraine suffered a traumatic economic collapse during the 1990s and that poverty rose sharply, failure to quickly rectify the remaining data problems will have more serious costs in future as it becomes important to know exactly how well given policy choices are working. The national accounts figures remain weak, partly as a result of the need to shift from central-planning concepts to market concepts, partly because of the continuing importance of the hard-to-measure informal sector, and partly because of the need to build up the relevant human capital to maintain the information system. Figures relating to income and consumption inequality and to poverty also remain problematic, though the institution in 1999 of systematic household surveys means that the key step has been taken. Now it is a matter of gradually improving the quality of the data collected and the feed-back between analysts and data collectors. Much progress has been made but a considerable distance has yet to be covered.

Underestimation of the complexity involved in a reform process/transition like that of the Ukraine is damaging because it leads both to some bad policies being adopted and to delays in the implementation of needed ones. The most striking example of oversimplification was that of the Western economists who confused lack of restraints on markets with well-functioning markets. Put another way, they failed to recognize that many markets, if they are to work well, do require the constraints of an adequate legal system, of transparency, of minimum levels of competition, and so on. Failure to recognize these needs contributed to the delay in embarking on the institution-building that must accompany such a major transition.

INTRODUCTION

Ukraine performed particularly badly during the transition away from the former central planning system. This result is blamed on a combination of a sluggish reform process, strong negative exogenous shocks, and a collapse of governance, which contributed both to a high level of corruption and to the slow and erratic reform process. An intractable political setting in which strong opposition to the transition from a sizable share of the population has contributed directly and indirectly to the slowness, lack of coherence, and high levels of corruption associated with the process.

Although these broad features of the process are not in question, the depth of the post-reform economic decline and the length of time before any recovery began remain matters of debate, because official figures on the performance of the economy are misleading and much depends on the imprecise estimates of the changing size of the unofficial (that is, underground or unregistered) economy. Discussion of what has gone wrong and what has gone right requires some feel for what has happened to the economy, to income levels, to inequality, and to poverty. We turn to this issue in the next two sections of the paper.

Before a review of the transition period (since 1991), it is useful to identify the aspects of this history that are of special interest in the context of pro-poor policy making. One set of possible lessons would be relevant to other countries undertaking similar transitions in the future. That group of countries is now small, however, so we do not focus heavily on lessons whose relevance would be limited to them. Another set of lessons might be relevant to countries undertaking some of the same or similar reforms, or simply passing through a transition that, although not due to major changes of economic structure or policy, shared many features of the process through which Ukraine has been passing. This set of countries is much broader. Countries that undertake even a subset of the reforms pursued by Ukraine might learn something from its experiences with specific reforms—difficulties (political, administrative, and other) and the magnitude of the ultimate benefits.

The shift from central planning to the market as a way of organizing economic activity involves two broad challenges in a country such as Ukraine. The obvious one is to develop the market apparatus and its supporting institutions from their very incipient levels at the start of the process to a well-functioning one that can outperform the central planning approach. It is to be expected, for many and varied reasons, that this shift of approach will be difficult and that economic output will fall at least in the short run. A less obvious but perhaps greater challenge is to effect the sought-after improvement in efficiency of resource use and in output without a significant increase in inequality and a corresponding increase in poverty. Prior to the reforms, the Ukrainian economy was characterized by a significant amount of surplus labor taking the form of “labor hoarding” by enterprises. A concomitant of this situation was a marginal productivity of labor often probably well below the wages paid, and sometimes even zero. State-enforced income sharing was used to produce the low levels of inequality that, especially by the late 1980s, appear to have characterized the Ukrainian system. From this starting point, a quick shift to a full market-based mechanism of resource allocation and remuneration could push the wage level down dramatically, even if markets performed their allocative function perfectly. The pre-reform country might be characterized as suffering from latent or disguised

dualism—one that would quickly manifest itself during the transition to the market.¹ Wages would be lower and poverty higher than before the transition. Wages would also be lower and poverty higher than in a market-based country characterized by a similar underlying dualism but that had generated (or in some respects always had) the natural market-system response to such dualism.

That response takes three forms. First, low-income countries tend to have informal safety nets involving patterns of mutual assistance when income gets dangerously low. Modern societies, whether capitalist or communist, replace this system with state-funded support, which can take the form of employment by the state even when the worker is not needed. In the presence of such state support the previous societal safety net mechanisms tend to erode. If the state support is then removed quickly, some time is required for the earlier informal support system to be even partially restored, if indeed it can be. Second, modern market-based societies provide state support in the form of unemployment insurance, welfare assistance, and in other ways, but not by state employment. Here, too, it requires some time for the previous form of assistance to be replaced by the new one. Finally, and quantitatively most important, dualistic market economies develop large sectors (in terms of employment) in small-scale agriculture and small-scale non-agriculture, much of which is referred to as the informal sector. Although these economies suffer the basic malady of dualism, with an inefficiently large share of the capital allocated to a few workers, the rest of the economy (for example, small farms and micro, small, and medium-sized enterprises) has nonetheless had some time to make the best of the resources it does control; to evolve entrepreneurial skills; and hopefully to benefit from reasonably efficient input and output markets, even when these are biased against these smaller firms. Although qualitatively, this sector faces many of the same challenges and impediments as does its nascent counterpart in a formerly centrally planned economy, they are all likely to be less severe. In the best of cases, these sectors are relatively efficient, decently supported by government policy, and dynamic. The truer this is, of course, the less dualistic is the economy as a whole.

A Decade of Transition

Transition—whether of the more extreme form of post-Communist systems or the partial version experienced by other countries, which make discreet shifts to give markets a higher role in resource allocation—involves some standard elements. The two key processes in post-Communist transitions are reallocation of resources among industries and restructuring within surviving firms—for example, labor rationalization, product line change, and new investment (Blanchard, 1997). Kornai's (1998) system paradigm of transition finds two principal incentives to encourage profit-maximizing market behavior: forcing a move from a sellers' to a buyers' market by price liberalization, and enforcing a hard budget constraint on enterprises.

The key policy actions include:

¹ “Dualism” may be defined as a situation in which a high share of the country's capital and other non-labor resources require only a small share of the country's labor to achieve their potential output, given the technologies employed in that “modern” sector. This means that the rest of the labor force is disguisedly unemployed in that modern sector (as in the Ukrainian case), openly unemployed, or employed in an informal sector.

- Macroeconomic stabilization;
- Price and market liberalization;
- Liberalization of the exchange and trade systems;
- Privatization of state-owned firms;
- Establishment of a competitive environment with easy market entry and exit; and
- Redefinition of the role of the state as the provider of macro-stability, a stable legal framework, and enforceable property rights and occasionally as a corrector of market imperfections (Havrylyshyn, 2001, 55).

One school of thought includes these basically Washington Consensus² components together with the view that more rapid and earlier implementation is better, with Sachs (1996) at the extreme of the range of views on this. Others argue that the transition can occur too quickly, causing costly disruption and thereby risk, and undermining the will to continue (for example, Aghion and Blanchard, 1993). Stiglitz (1999) argues that excessive speed was a problem in privatization. A third school emphasizes that stabilization and liberalization will not have the sought-after results unless the institutions that underpin market functioning are adequately developed (Murrell, 1992). Some argue that the Washington Consensus gave too little attention to this aspect of the process.

According to Havrylyshyn (2001, pp. 55-56), the core concept of transition implies that:

- Output will decline initially because unsalable goods will accumulate and their production be cut back;
- Growth of the new more efficient activities will not occur until the new incentives are in place and credible; and
- In the early recovery period, a variety of efficiency improvements are more likely to be useful than is an expansion of either investment or labor factor inputs.

In economies that have become highly dualistic in their productive structure, whether mainly through the composition of their resource endowment or mainly through their past policies, the challenge of finding a market solution³ to the naturally high levels of poverty and inequality is complex. It involves not only the shifting of resources from overextended sectors and technologies to more appropriate ones but also shifting rents from sectors and technologies that generate them but that either cannot expand (such as because of limits to the size of the market) or could not create much employment through expansion even if that expansion were possible.

² The term “Washington Consensus” was coined by John Williamson in 1990 to refer to “the lowest common denominator of policy advice being addressed by the Washington-based institutions to Latin American countries as of 1989.” Williamson, John (2000) p. 251. “What Should the World Bank Think About the Washington Consensus?” *World Bank Research Observer* 15 (August): 251-264.

³ That is, dealing with that challenge in a way that does not simply alleviate poverty by providing some form of welfare payments to the poor (as in industrial economies, which, however, operate on the assumption that most of the poverty dealt with in this way is either transitory—related to the business cycle—or results from specific problems that make labor market participation impossible for the person) or by creating jobs in which labor productivity is small or nil (as in some of the formerly centrally planned economies).

Where dualism is the result of “Dutch Disease” conditions,⁴ the rents from those activities must be used to raise present and future productivity in other, more labor-intensive sectors. This tends to be difficult because a significant share of the rents from the comparative advantage sector must either be wrested from the private agents who control those sectors and usually wield considerable power or, as in cases such as Venezuela and Chile, put to better use than the public sector has been able to achieve, given its tendency to misuse a portion of them in creating unproductive public sector employment and in corruption. To further complicate the challenge, it may not be evident how best to invest such rents because current market signals indicate such a strong comparative advantage for the sectors that create little employment. Countries must either pick future winners and invest in them (as Chile did with its fisheries industry from back in the 1960s, with payoff a couple of decades later) or invest in human capital in the hope that it will contribute to comparative advantage in some employment-creating industries. Finally, even if some reasonable assessment is made in terms of where the new jobs should come from (for example, small-scale agriculture or the non-agricultural SME sector generally), it may be hard to identify and implement the support policies called for if that sector is to increase its productivity and competitiveness.

Each of these challenges exists to some degree in Ukraine, along with further complicating factors. As of 1991, the economy had a substantially dualistic character, mainly because of past policies and the nature of Ukraine’s insertion in the economy of the USSR rather than the structure of resource endowments. Large-scale, relatively capital-using, agriculture was a policy choice, as was large relatively capital-using industrial technology. The rents generated by the large-scale sector were probably either less or less easily transferable than in some cases of Dutch Disease. Worse, as soon as the need to develop the productivity and employment-generating capacity of other sectors emerged with the decisions to dismantle elements of the old system, the economy was in crisis, taxing capacity was slipping, and the decision-making process was anything but coherent and single-mindedly fixed on a shared view of the future.

Such differences notwithstanding, this broad parallel between the transition from central planning to the market and the partial transition from heavily interventionist market economies to much less interventionist ones has enough elements of commonality to make experiences from each category of interest to countries experiencing the other sort of transition. It is, for example, inevitable that in either case a freeing of the labor market will generate an expanding informal sector unless there is some institutional base that allows for open unemployment.

Whenever a country is attempting to put in place new policies and the supporting institutions, difficult questions of sequencing and of the optimal speed of the reforms arise. This applies to the transition country experience as well as to other countries attempting a significant reduction in public sector management and intervention in the economy. Arguments for quick reforms in macroeconomic policy, trade policy, privatization, and many other areas include the following:

⁴ “Dutch Disease” refers to situations in which countries have a strong comparative advantage in goods and services whose production creates little employment. More narrowly defined, Dutch Disease refers to the adverse effect on a country’s other industries that occurs when one industry substantially expands its exports, causing a real appreciation of the country’s currency. The phenomenon is named after the effects of natural gas discoveries in the Netherlands.

- It is important to move as quickly as possible toward the sought-after economic structure so that price and other incentives to private agents (including foreign investors and leaders who will make decisions about how to interact with the country) will be the right ones. As long as inefficient sectors are subsidized, resources will not leave them as fast as they should or may even continue to be induced to enter them.
- Harmful vested interests may be built up around inefficient sectors and activities if their resource base and their incentive for retaining interest in those sectors is not eradicated quickly. It may take sudden and large reforms to break the vicious circles built around these processes.
- The political mood for reform may not last, so what is not done quickly may not be done at all.

The main arguments for approaching reforms gradually are these:

- The optimal path of resource allocation from losing to gaining sectors is not a sudden one, especially in the case of labor. Changing the relative incentives too abruptly may lead to non-utilization of resources that would still be better used in losing sectors than not used at all.
- The use of “correct” market prices (those of the international economy, assuming that the country is attempting to increase its integration into that world economy) will not lead to socially optimal allocation of resources during the transition period. Two types of arguments underlie the concern that a quick shift to a price-based system will not work well. First, if the equilibrium price of labor is too low (perhaps zero), either a social uprising is guaranteed or some strong palliative measures will have to be found at a time when the state is trying to remove itself from the economy and to avoid large new social (and any other) expenditures. Second, and more generally, it is not reasonable to expect the previous decision makers on enterprise management (to the extent they retain that authority) to respond to market signals quickly nor to expect new and inexperienced decision makers to use the markets well, given that market institutions (transparency and stability of prices, for example) will take some time to evolve in the best of cases.

Both arguments have much weight, a fact that underlies the proposition that it would be a minor (or perhaps major) miracle if the transition could be effected without considerable pain. The only reason one might plausibly hope that a transition could be carried out without much deadweight loss would be that the previous system’s high levels of inefficiency provided a sort of cushion. In other words, the new economy would not have to perform near its longer-run potential immediately to avoid a decline in incomes if it could quickly eradicate the losses associated with that prior inefficiency. This argument has been made strongly with regard to Ukraine and other former Soviet bloc economies by Aslund (2001) and others. It has also been made in highly interventionist non-Communist countries, where a combination of corruption and other forms of waste are believed to siphon off significant shares of GDP.

Regardless of how quickly plans, blueprints for the future, and the hoped for outcomes are changed, the process itself inevitably will be gradual because those plans involve building up new forms of physical and human capital, including entrepreneurial capacity, and developing currently underdeveloped institutions. This is not the same as saying the reforms should be gradual, however. The optimal policy would often involve quick reforms in some areas and more gradual reforms in other areas. Path dynamics, involving many complexities, are the reason reform sequencing gets so much deserved attention in the discussion of transitions.

With more than 10 years of experience of transitions in Central and East European and the former Soviet economies, an empirical literature now provides insight into the determinants of successful transition. Strong caveats must be borne in mind as one draws on this literature:

1. The process of transition can be very complicated. Accordingly, it would not be surprising if considerable time and effort were required to identify the causal processes with any precision.⁵ That effort is still in its early stages.
2. Data deficiencies are notorious because the pre-transition data frameworks are not what is needed to assess progress during the transition and it takes time to set up the required new system. In addition, the large scope of the underground or unofficial economy presents a major challenge to accurate measurement of even such basic variables as GDP.
3. The analytic effort thus far has been directed almost exclusively to understanding the determinants of GDP growth and not to the even more challenging task of explaining how inequality and poverty have evolved (even though some effort has been put into describing the trends in those variables).
4. The determinants of performance during the transition may be different from the determinants of post-transition success in the same countries; the most obvious indication this is the case comes from the fact that the empirical work on the transition has found growth of factor inputs to be universally unimportant as a contributor to good economic performance (Havrylyshyn, 2001, p. 53). Rapid liberalization might be the best way to encourage transfer of resources from the old economy to the new one, but not to foster maximum long-run growth in that new economy. These are two different processes.

The above caveats notwithstanding, authors such as Havrylyshyn conclude that the empirical evidence is relatively strong with respect to some of the hypothesized determinants of successful transition. In particular, standard factor inputs are not important as a determinant of

⁵ Havrylyshyn (2001, p. 77) notes it would be daunting to try to model and test for the growth process with all the individual elements of the transition process specified. Only two studies thus far have attempted to derive a structural form from first principles (Hernández-Cata, 1997 and Berg et al., 1999); between these two, there are some differences in results, which may be the result of differing methodologies, time periods, and so on. Most studies involve ad hoc but reasonable regressions. The first comprehensive study was that of de Melo, Denizer, and Gelb (1997). The first studies were necessarily more cross-sectional in character, with later ones having a more panel flavor, given that more time has elapsed since the beginning of the reforms.

growth, stabilization is necessary, liberalization and structural reforms strongly affect growth performance, and unfavorable initial conditions can hinder growth.⁶

A no pain-no gain view, which implicitly or explicitly assumes that stabilization and reform will have some real costs, finds strong support in many studies (for example, Aslund, Boone, and Johnson, 1996; Herández-Cata, 1997; and Heybey and Murrell, 1999), but Berg et al. (1999), using more sophisticated lag structures and separating the public and private sectors, conclude that the effects of structural reforms are mostly positive from the beginning. The decline of the public sector may not be large and is any case ambiguous in its implications for real levels of consumption given the doubtful value of much of what it produced..

Although most analyses that have tried to identify the impacts of privatization find that it improved performance and increased efficiency, the evidence is not overwhelming. Havrylyshyn and McGettigan (2000) conclude that too little attention has been paid to the methods and the institutions of an appropriate market environment. Zinnes, Eilat, and Sachs (2001) go further in trying to disentangle the effects of formal change of ownership and those of the market environment facing firms, finding that the former has virtually no effect and that the product effect is strong but there is a threshold level.

Recent studies of the transition have focused more on institutions than did the earlier ones, usually finding that the variables chosen to reflect institutional features matter and that the impacts increase over time. But the specifications of many analyses in this category are controversial. For example, some have found insignificant effects for the other standard policy variables like liberalization when the institutional proxies are included. Further, measurement difficulties are most severe in connection with institutions. These difficulties alone would probably be sufficient ground for taking any conclusions cautiously about their role.

Given the complexity of dynamic processes, the small number of recent cases from which lessons can be drawn, the still relatively small amount of study addressed to them, and the absence of reliable data on growth and many other features of the actual transition process, it is not surprising that there is considerable debate on many points, and it is possible that no one has understood the process very well as yet. On one general point, there is no disagreement: where aspects of a transition process allow the creation and instilling of corrupt or inefficient practices, there is a high priority to taking actions against them.

Countries with high levels of state involvement that then shifted discretely toward the market have experienced a partially parallel transition to that which a country such as Ukraine must undergo in order to base its resource allocation and growth processes on the markets. Chile is one of the better-known examples. The transition after the overthrow of President Allende in 1973 was difficult, with two major recessions, a prolonged period of very high open unemployment (over 20 percent), a major increase in income inequality and poverty, and

⁶ Encouragingly Loungani and Sheets (1997), using the electricity index proxy for GDP, find the results on the major policy variables are not affected when this proxy is used to replace official GDP figures. Aslund (2001) makes some “very rough corrections” for the underground economy and several other Soviet-accounting problems and claims that the correction strengthens the positive effects of the reforms. As Havrylyshyn (2001) notes, the issue deserves more analysis.

heavy-handed political repression to quash social unrest. By the early 1980s, the economy had shifted to a fast-growth path, under which all of these negative features of the transition were eventually reversed except for the high level of inequality, which has not receded even after more than a decade of post-Pinochet democratic regimes.⁷ Chile's economy has long had a basic element of dualism, related to the Dutch Disease of having a strong comparative advantage in copper, an export that creates very little employment while putting most other tradables (that is, most of the agricultural and manufacturing sectors) at a comparative disadvantage.

The response in Chile and in many other countries with similar economic structures (such as Venezuela) has traditionally been a very large public sector that, like the centrally planned public sector of Ukraine, was characterized by excess labor relative to what was needed or productive. When the labor market was freed and allowed to function on a close to supply-and-demand basis, it became clear that the marginal product of some categories of labor was extremely low, taking the form of very high unemployment and sharply decreased wages. Chile responded to this crisis by taking many well-chosen growth promotion policies, including an attempt to develop comparative advantage in other sectors than copper. By good fortune, much of the groundwork to make some of these sectors competitive, as in the case of fisheries, had already been laid in earlier decades. In any case, Chile had relatively well-functioning markets for inputs and outputs before this shift to a less interventionist strategy was undertaken, so the challenge it confronted was a good deal less severe than that faced by a country like Ukraine. However, the initial level of inequality in Chile was greater than that in Ukraine.

Broadly speaking, the employment challenges in Ukraine, and thus the distribution and poverty challenges as well, involve raising labor productivity in enough sectors to bring the equilibrium wage up to a satisfactory level. The less that is done in agriculture, either by raising the labor absorption tendencies of large farms or by growth of a smaller farm sector, the more that must be done outside agriculture, again by a combination of increasing the capacity of larger enterprises to absorb labor and by achieving a buoyant growth of the SME sector. In the non-agricultural sector, it appears that, even if all the possible policy tools available were brought to bear, the desired results would still take a long time to emerge, given the presumably low level of entrepreneurial skills and the highly imperfect markets. Thus, special efforts would need to be made in any areas where positive results could be produced—for example, perhaps training for entrepreneurship or other forms of human capital, assistance in the setting up of subcontracting arrangements, selective labor subsidies, selective tax breaks, initially subsidized technical assistance, and special credit for exporting or for growing the firms.

The empirical analysis of transition success has focused almost exclusively on GDP as the dependent variable. But a central issue in transition economics is labor reallocation. From a welfare point of view, it would be superior to pull labor from its previous low-productivity

⁷ There is considerable uncertainty about exactly how much inequality rose in Chile between the Allende period and the present, for example. According to some figures, the increase is the largest seen in recent times in any market economy, with the Gini coefficient rising by 10 percentage points or more. According to other figures, the increase is no more extreme than in other cases in Latin America, with the Gini rising by no more than 5 percentage points.

activities to higher-productivity activities because these grow and can offer wages high enough to induce labor movement. Such labor transfer often confronts rigidities of one sort or another. In Ukraine, few collective members have opted to receive plots of land and become private farmers because of the risk involved and the lack of support for such private farming. Would enforced privatization on a small scale help rapidly create the needed markets and support systems, or would it lead to severe income and welfare losses? This is partly a matter of timing and sequencing, rather than a simple yes/no question. Chile opted for an extremely high unemployment rate, assuaged in its welfare effects by a last-resort low-wage and therefore self-selecting public employment scheme. That economy achieved fast growth so the high unemployment did not last more than a decade, although many argue that only the repressive capability of the Pinochet government made that strategy feasible. Clearly, the alternative of going slowly runs the risk of losing momentum, of not confronting agents with a bad enough current option to force them to think seriously about options, to be willing to run some risks, and to try to develop new skills. The best route depends on how people behave in situations of transition and stress.

The experience of Ukraine since independence falls in the category of slow but not deliberate reform towards the use of market principles to guide resource allocation. The frequent policy reversals, the lack of continuity and the lack of coherence reflect several common features of such a transition process:

- i) As the process began there was little collective wisdom world-wide, and even less immediately available to Ukraine, as to the best paths for a country beginning where it began. Among other things, such conditioning factors as the ongoing economic declines in other former Soviet bloc countries were only then unfolding; neither their ultimate severity nor the implications for Ukraine were easy to predict.
- ii) There was also an inevitable range of views among decision-makers on many important issues, reflecting both differences in self or group-interest and also in understanding of the conditions and constraints of the Ukraine economy. It is no surprise that the situation was viewed very differently by holdovers from the previous regime, by Western-trained advisors, and by others, some of whom knew more about market economics than the holdovers and more about Ukraine and its constraints than the Western-trained advisors.
- iii) Some lessons were learned by paying the price of error, including that high levels of monetary expansion produce serious inflation unless rigid rationing substitutes for the price system as a resource allocator.
- iv) Relative power and influence swung back and forth among the competing groups, leading to some of the policy reversals, which took place.

Bearing in mind the complexity of such a major transition process as Ukraine embarked on, the idea of policy continuity in the sense of a master plan, thought out in advance and then stuck to, would appear closer to dream than to reality. Whether reforms were carried out suddenly or gradually, important surprises were almost assured. In the case where the decision favored an immediate shift to free markets and to world prices, it was inevitable that the weakness or total absence of important market-sustaining institutions would prevent some markets from working as well as they could have done under better conditions and require attention to be given to the correction of those weaknesses.

These considerations make it hard to judge and even to categorize any single country's performance in absolute terms. Much can thus be gained by comparing both the processes and the performances across countries undergoing somewhat similar transitions. It is on the basis of this sort of judgment that we reach the conclusion that Ukraine's experience has been one of both slow and relatively unsuccessful reform. That experience is consistent with, though of course does not prove, the proposition that reforms spread out over a long period are less likely to be successful. It is not a test of whether reasonably well-designed but gradually executed reforms are or are not superior to more rapidly executed and equally well-designed ones.

A major distinction is needed between reforms initiated quickly but applied gradually and those which are simply put off for a long period. Some policy areas can be categorized in this latter fashion in Ukraine, and some of the high cost to the population of the transition can be attributed to such delay, as opposed to gradualness.

An interesting feature of the gradualist approach which has, de facto, characterized the experience of the Ukraine (and that of Russia) is the continuing importance of barter arrangements both between enterprises and between them and their employees (the latter of which is discussed below). Thirsk (2003a) describes the "network of arrears" which is involved in this process. Apart from being an inefficient way of undertaking the exchange of goods and services, it a) allows the continuation of the soft budgets which have been a hallmark of centrally planned economies like Ukraine; b) passes the arrears of firms traditionally in that condition along to others who are not, and c) ultimately affects the fiscal condition of the state which is unable to collect taxes from the potentially profitable but actually unprofitable victims of the barter process. The continuing fiscal struggles of government in Ukraine, in spite of high legislated tax rates, are linked to this process, in which firm-level sickness proceeds to infect otherwise healthy firms as long as debts cannot be collected in monetary terms.

DECLINE AND RECOVERY IN UKRAINE, 1991-2002

Ukraine became independent in August 1991 after more than 70 years of Soviet rule (and centuries of Russian rule). On the eve of independence Ukraine's prospects seemed bright. As the democratization process began, the country was considered to be a leading candidate for successful transition to a market economy because of its strong industrial and agricultural resource base. Its impressive resources included a well-educated population and one-third of the world's most fertile soil variant. Despite these outwardly favorable conditions, the first decade of independence has been dubbed, alternately, as a disaster, a lost decade, and a case study in state-sponsored looting. Until recently it was best known for its "heavy tax and regulatory burdens, corrupt enforcement of laws, frequent and unplanned changes in regulations, and no clear direction of economic reforms." (Conway, 2002, p. 4). The last few years, however, have seen considerable improvement in the tax and regulatory areas, and the government appears at last to have a clear idea of where it wants to go, making accession to the European Union its main policy objective and working to amend Ukrainian laws and regulations to meet EU standards. It is also trying to gain entry to the WTO (Thirsk, 2003b).

In the post-transition decade, the entire former Soviet Union experienced substantial economic decline but Ukraine has stood out in two main regards. First, according to the official figures, Ukraine is the only country to record not one single year of economic growth in the 1990s. Second, according to those same figures, it suffered the greatest cumulative decline of all transition countries that were not involved in war; official GDP in 1999 was only 40 percent of the 1990 level (see Table 1). With a population of nearly 52 million at independence, Ukraine had closer to 48 million inhabitants in 2002. Population decline is a result of factors such as decreased life expectancy, lower birth rates, and emigration, all of which can be attributed to economic turmoil.

Table 1: GDP Decline and Recovery, 1989-2002

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
GDP annual change, % (1)			-8.70	-9.90	-14.50	-22.90	-12.20	-10.00	-3.00	-1.90	-0.20	5.90	9.10	4.60
GDP growth (base 1991=100) (1)		10.00	91.30	82.30	70.30	54.20	47.60	42.90	41.60	40.80	40.70	43.10	47.00	49.20
GDP per capita annual change (%) (2)	3.37	-6.59	-8.58	-9.96	-14.27	-22.55	-11.49	-9.31	-2.19	-1.18	0.59	6.67		
GDP per capita (constant US\$ 1995) (2)	2,108	1,969	1,800	1,621	1,390	1,076	953	864	845	835	840	896		
Population, millions (3)		51.69	51.89	51.99	51.86	51.47	51.08	50.64	50.25	49.85	49.45	49.04	*48.42	**48.24

(1) National Bank of Ukraine website.

(2) World Bank, *World Development Indicators 2002*, CD-ROM.

(3) UNDP, *Ukraine Human Development Report, 2001*.

* State Statistics Committee 2001 Yearbook.

**same as *, estimated from total number of pensioners, 29.9 percent of the population at 14,423,064.

Why was the poverty experience of Ukraine so negative during the 1990s? A lack of endowments is not the explanation. Growth was reasonably good in the previous period. Exogenous shocks were a significant contributing factor—in particular, the economic collapse of the Soviet Union and with it the collapse in demand for many Ukrainian exports, and the end to very cheap energy. But exogenous shocks are not by themselves enough to explain why this country declined further and over a longer period than most of the other former Soviet bloc countries. Those shocks were complemented by a collapse of governance which aggravated their effects and impeded positive policy responses to them.

The Triple Shocks of Independence⁸

Ukraine's experience during the 1990s reflects, above all, three major shocks brought by independence and the collapse of the Soviet Union: a tremendous increase in the price of energy, major loss of export markets formerly concentrated in the Soviet bloc, and a collapse of governance. Each of these had serious negative consequences. Both of the economic shocks were the result of the particular features of the Soviet economy.

The energy cost shock took the form of energy prices rising by a factor of about 12 (Thirsk, 2003a) when Russia began to sell its oil and gas on world markets at world prices instead of virtually donating it to the republics of the USSR like Ukraine. “During its years of dependence on Soviet hydrocarbons, Ukraine had become unbelievably energy intensive and energy dependent, not only in the industrial sector, but also in agriculture, transport, and housing. Even building-dependent services such as schools and hospitals were heavily energy dependent, and as much as a third of their entire budget went to energy costs once Russia raised the prices.” (Hansen, 2003)

The severity of the effects of lost trading partners reflected the facts that (a) under the Soviet system, Ukraine was heavily dependent on trade with the other republics, and (b) that such trade fell abruptly with the declining economic fortunes of those other republics, their tendency to increase local production where they could, and the collapse of payments mechanisms. Under the Soviet system, total trade of the Ukraine (exports plus imports) is estimated to have exceeded 100% of GDP. “Ukraine produced many products such as space rockets for which no local market existed, and it produced other products such as wheat and sugar beets for which domestic demand could absorb only a portion of total output.

Once the Soviet Union broke up, two forces came into play that made it virtually impossible for Ukrainian enterprises to survive. On the one hand, orders no longer came from Moscow forcing the exchange of goods among republics. On the other, republics (especially the richer ones such as Russia) began developing and expanding their own capacity to produce the goods that were formally imported from republics like Ukraine. Closely related to the collapse of demand in other republics for Ukraine's goods was the collapse of payments mechanisms. Prior to late 1991, the USSR was a common market with a common currency. After that point, the central banks of the individual republics started issuing rubles on their own. This quickly

⁸ We are indebted to John Hansen both for this phrase and for the bulk of the material in this section.

destroyed the value of the ruble, both as a measure of value and as a medium of exchange” (Hansen, 2003). Dollars could not be used as an effective substitute for the ruble in the short run because of a dollar shortage in the Former Soviet Union, reflecting a short-run inability of countries like Ukraine to earn dollars through export to the West. This inability was due in part to high energy dependence of production in Ukraine and to outdated Soviet designs and low quality.

These effects of these economic shocks were compounded by the collapse of governance. From the Soviet system of governance, defective in many ways but at least able to keep things running according to a more or less predictable set of rules, the country fell into anarchy. Under this “law of the jungle” the most agile predators (rent-seekers) carried off the spoils. Gains were privatized and losses were socialized. Workers in general—and the poor in particular—were defenceless. That major increases in inequality and poverty took place comes as no surprise under these circumstances.

The microeconomics of the process of decline involved government provision of loans to enterprises in crisis, which left the firms facing soft budget constraints and eventually led to hyperinflation through excessive monetary creation. As Hansen (2003) puts it, the sequence of events was as follows:

Enterprises lost their markets, began to fail financially, and stopped paying their workers. Faced with massive social unrest and a dramatic increase in household poverty, the government loaned the enterprises money so that they could pay their workers. When the government ran out of money, it started printing more—resulting in hyper-inflationary symptoms. When the inflationary impact of monetary emission became obvious and unbearable, the government started borrowing money to prop up enterprises and their workers. When the service on this debt threatened in 1998 to consume 100 percent of government revenues, leaving nothing for wages, salaries, petrol, or anything else, Ukraine's lenders (who were already spooked by the Asian Crisis of 1997 and its spin-off effects in Russia in 1998) refused to lend the government any more money. With the flow of money shut off by traditional lenders including the commercial banks and, increasingly, the international financial institutions such as the IMF and the World Bank, the government effectively (though not technically) defaulted on its loans and forced the lenders to restructure future payments. This experience taught the government and the people of Ukraine the importance of living within their means. As a result, the budget deficit was cut sharply, the government stopped absorbing virtually all new credit issued by the banking system, interest rates began to fall, and the foundations for recovery were established. In 2000, Ukraine saw its first economic growth in over a decade.

In Hansen’s judgment, the three shocks (energy, loss of export markets, crisis of governance) explain the collapse of enterprises throughout Ukraine. The ineffective response of an inexperienced government to this collapse explains the depth and duration of the 1990s depression in Ukraine.

The Recovery⁹

Although growth emerged clearly only at the end of the decade, the foundations for recovery began to be paid in the mid-1990s with the restoration of macro-stability through more prudent fiscal policies and tighter monetary policies that stabilized the external value of the new currency. Ironically, the Russian financial meltdown of 1998 turned into a boon. While the initial impacts--high interest rate levels and associated problems in the real sector, were negative, the ultimate benefits came from the fact the crisis led to a significant depreciation of the Hryvnia, not with respect to the Russian ruble, but in relation to all other major currencies. When positive growth appeared in 2000 it was export led; by 2001 the ratio of Ukrainian exports to GDP was nearly 60 per cent, a very high figure for such a large economy as the Ukraine. The key contributors to this export surge were the agriculture sector and the heavy metals and metallurgical sectors. The depreciation also favored import substitution. By the last few years this added up to a large current account surplus that has supported a strong Hryvna and steady growth in central bank hard currency reserves.

As noted below, Aslund (2001) argues that the Yushchenko reforms of 2000 were the key factor in the recovery and that the Ukraine experience thus broadly contradicts the merits of gradual reforms. The merits of those reforms notwithstanding, the trade-based argument just mentioned appears much more persuasive, both because it stretches the imagination to believe that the reforms alone could have reversed the growth pattern so quickly and because it has so often been true in other countries that a substantial real devaluation, by itself, can turn an economy around. In this specific case a large growth impact is not surprising because by the time of the devaluation the macroeconomic conditions had been stabilized and because the Ukraine did have a previous history as an exporter of agricultural and metal-sector products which could be at least partially resuscitated.

The Political Backdrop

In the initial period of Ukrainian independence, massive shortages appeared because, in the face of dwindling supplies of many good the state regulated prices at artificially low levels and no leading politician was willing to take the blame for the burst of inflation that was sure to come when prices were freed. When partial liberalization came in early 1992, as part of an agreement with Russia (Aslund and de Menil, 2000, p. 5), inflation took off. By the end of 1993, prices were doubling every month. From December 1992 to December 1993, they rose by 10,250 percent. Energy prices, previously extremely low by world standards, now skyrocketed, leaving many energy-intensive firms unprofitable. The inflation was fuelled in part by the government's decision to follow a preservation strategy with respect to declining enterprises and industries; rather than restructuring them, it sought to support them through large direct subsidies, financed by borrowing from the central bank. Although this naturally created upward pressure on prices, a lack of understanding of market economics contributed to the common perception that inflation was largely a problem imported from Russia; much early discussion thus focused on how to isolate Ukraine from Russian inflation and on establishing

⁹ This section draws heavily on comments by Wayne Thirsk (Thirsk, 2003).

an independent currency. Accordingly, in January 1992, Ukraine introduced its own coupon, the karbovanets, as a parallel currency to the Soviet ruble, which continued to circulate. But instead of bringing reason and stability to public finances and monetary policy, the introduction of the karbovanets had the opposite effect. The authorities printed it with impunity, with the result that prices rose by 2000 percent in 1992, setting the course for a bout of hyperinflation that only started to be brought under control in 1994. Real wages plummeted and household savings were wiped out, contributing to a widespread deterioration in economic well-being.

During this time of extreme disorder, economic reform took a back seat to political and nation-building exigencies as Ukraine disengaged from Russia. Although some leaders sought to build new national institutions, what actually emerged was a massive centralized bureaucracy and a cumbersome regulatory system, with much of the old Soviet establishment remaining in place. When many of this group sought to transform their power into material gain under the changing rules of the game, the way was paved for massive rent seeking and corruption. Those who thrived under these conditions included government officials, state enterprise managers, new entrepreneurs, commodity traders, and bankers. The close ties between politicians and big business are reflected in the fact that most of Ukraine's leading businessmen were (and still are) parliamentary deputies. The gas trade is an especially prized activity, from which a handful of Ukrainian oligarchs have extracted billions of dollars in illicit gains. In 2002 Transparency International's Corruption Perception Index gave Ukraine a score of 2.4 out of a possible 10 (where 10 is "clean"), placing it in 85th position out of 102 countries. This was a slip from Ukraine's 1998 rating of 2.8. In 2000, Aslund described Ukraine as "a full-fledged rent-seeking society, which is construed to benefit a small elite living off monopoly rents that are costly to society as a whole" (p. 273).

Transition to a market system in Ukraine has run afoul of both the legacy of the Soviet period and the current political structure. Levitsky and Way (2001) describe post-Soviet Ukraine as a "competitive authoritarian regime" in which authoritarian tendencies amply displayed by various governments are not able to extinguish potential sources of opposition, including the parliament, nor are the forces for a more democratic regime able to rein in that authoritarian behavior. Although elections matter, governments still have wide latitude for behavior, including various forms of corruption. Within this system, political cleavages create three strong electoral groups. On the left, the Communists, who staunchly oppose economic reforms, have the support of a solid 30-40 percent of the vote in any given election. This group comprises mainly Russian speakers from the eastern part of the country, which became part of Russia at the time of the Russian Revolution. On the right are the nationalists, who focused their energies on national independence and have generally supported market-oriented economic reforms; their electoral support comes mainly from the Ukrainian-speaking western part of the country. Third is the non-ideological center, including four oligarchic parties (corresponding to or owned by economic-political groups), currently represented by President Kuchma. Neither of the two broad opposition groups is strong enough to win national elections on their own, but their opposite ideologies make it impossible for them to join forces to defeat the authoritarian centrist regime; each prefers the existing government to the other extreme (pp. 25-26). Under the weight of this stalemate, reforms have generally been sluggish,

incoherent, and erratic, in spite of periods of promise. Corruption and the accumulation of illicit wealth have flourished.

Hellman (1998) focuses on the isolation of political leadership from the population in this stalemate, and on the population's lack of incentive to push for reforms. Economic and political elites are so insulated from public pressure they have little to no incentive to embark on reforms that would impede their abilities to extract rents. The public, in turn, has little incentive to pursue the necessary reform paths because of fear that these might lead to even further hardship than they currently face.

Although market reformers have not been able to progress in a straightforward fashion during the post-Soviet period, the above constellation of forces has not totally prevented change, partly because unfolding crises have forced the hand of policy-makers. The reforms undertaken, however, have often been followed by counter reforms; given the distribution of political forces described above, major reforms are certain to face powerful opposition which can then mount enough pressure to produce a counter reform. The first such reversal occurred in 1993 (Kaufmann, 1995) and the second in 1995-1997 after a far-reaching reform effort had been pursued for almost a year. Aslund (2001) sees the 1994-1995 reform as "a temporary moderation of rent seeking in order to maximize future rent seeking" (p. 266). The most recent reversal followed the reform efforts of former Prime Minister Yushchenko.

Aslund (2001) points out that Ukraine's ruling elite is well entrenched in both government and enterprise activities. In contrast to Russia, where business groups often openly oppose the government and get away with it, in Ukraine such opposition is less frequent because of the high level of dependence on government. Ukrainian businesspersons spend a great deal of time around parliament or government, more than their Russian counterparts, reflecting the continuing state-domination of the Ukrainian economy. Although the main Russian financial-industrial groups are thought to be involved in criminal activities, they are not considered outright criminal syndicates. In Ukraine, there seems to be no line at all between organized crime and the leading political-economic groups (p. 268). The Ukrainian groups often have two leaders, one senior government official and one enterprise leader, sometimes of a state enterprise. In Russia, one person, the head of a private enterprise group, usually leads the group.

One bright spot for reformers was the spate of actions undertaken in 2000 by the pro-reformist Yushchenko government. These measures are credited by some observers (such as Aslund, 2001) with restarting the Ukraine economic machine at that time, beginning in a growth rate of 5.9 percent in 2000, followed by 9.1 percent in 2001 and 4.6 percent in 2002. (As discussed above, this view is not fully persuasive in that it implies that the reforms would have had immediate effects on growth.) It seems likely, nonetheless, that they have had some positive impact. The measures included:

- Newly standardized government decision-making processes;
- Elimination of 250 unjustified privileges for the well connected;
- Introduction of order into budget and payments, including effective treasury control;
- Energy reform, which significantly reduced massive rents gained by gas-trade oligarchs;

- Land reform launched early 2000, disbanding collective farms;
- Improved business environment through the slow reduction of the large and intrusive state inspection apparatus and new introduction of low, simplified taxes for individual entrepreneurs; and
- Intensified privatization of large enterprises.

According to the official figures, the economic growth spurt was fueled by industrial production, which grew by 12.5 percent in 2000 and 14.2 percent in 2001, continuing somewhat less rapidly in 2002, at 6 percent for the first 10 months. Agricultural output also grew very rapidly in 2000 and 2001, at 9.2 and 9.9 percent respectively.

In attributing the growth spurt to the reforms, Aslund (2001, pp. 325-326) draws a very positive lesson.

By 1999, most observers had given up on Ukraine as a hopelessly corrupt and stagnant country. Therefore, it is all the more surprising that suddenly this country has recorded substantial growth, presenting an excellent test case for alternative ideas of reform.

Ukraine calls the bluff of insufficient demand. Its economy started growing only when its budget was balanced, monetary policy rigorous, and financing absent. As all of its reforms were highly gradual until the end of 1999, it attests to the inefficiency of gradual reforms. The country's sudden recovery, after finally turning to radical reform, suggests that radical reforms do not lose their effectiveness even after many years of mismanagement, if the reforms are sufficiently radical.

He goes on to note that:

Ukraine's main economic problem instead was that it was possibly the most characteristic rent-seeking society arising out of the former Soviet bloc. The surprise is that this seemingly stable oligarchic rule could be disrupted. The Yushchenko government concentrated on key economic measures, and its program amounted to straightforward radical market economic reform, although macroeconomic stabilization had already been accomplished, and half of the privatization effort was completed. Central state decision-making had to be brought under control, and far-reaching liberalization was attempted, while misappropriation of budget funds was reduced. Privatization and private enterprise development were pushed in whatever ways possible, with land reform and the legal security of small entrepreneurs being the key components. The greatest surprise was that the Yushchenko government succeeded in cutting the energy rents of the oligarchs just after they had financed President Kutchka's re-election. As value detraction had already been minimized, the radical liberalization and hard budget constraints prompted an instant supply effect.

Yushchenko's reforms were amazingly politically astute. Although a broad political coalition including the oligarchs brought him to power, Yushchenko wisely dealt an early devastating blow to the oligarchs, before they could oust him. He provided a textbook case for how a rent-seeking society can be broken up through division and hard hits, focusing on the important rents, while taking on one oligarch after another. These reforms would not have been possible if consensus had been sought, while the breaking of the previously cohesive elite rendered them successful. Privatization had made the oligarchs more autonomous from the state and one another, which facilitated the intensification of the competition among them.

Observers such as Aslund labeled these reforms both shrewd and necessary, dealing a blow to the oligarchs before they could oust the Prime Minister. But in April 2001, the centrist oligarchic parties and the Communists voted Yushchenko out of power.

Four major questions emerge from the debate around the recent growth spurt and Yushchenko's reforms:

1. Do the actions of the Yushchenko government provide a useful model of how to break the political-economy stalemate that has accounted for much if not all of the stagnation through which Ukraine has suffered?
2. Are one or a few of the reforms responsible for the bulk of the total benefits that could be attributed to the reform package? Some observers, for example, have argued that restoration of monetary-fiscal stability was essential. Controlling the rents previously generated in the energy sector may have been the single key to curtailing corruption and waste.
3. Even though the reforming government has been ousted, will many of the reforms and the associated benefits survive the return, at least for a time, to a more traditional, corrupt regime?
4. How much of the credit for the recovery should go to this set of reforms? A competing view is that the recovery is mainly because of good harvests and the accompanying exports, and there is no denying that the most impressive figure over these years is the tremendous (reported) growth of agricultural output.

All of these questions require more analysis. The economics of the recovery will probably be better understood within a few years as the competing interpretations confront one another and as the data base is gradually improved. The political economy questions may not be answered so easily.

For the moment, the main message we are inclined to draw is that, regardless of many other things, including high levels of corruption, a satisfactorily low real exchange rate can bring great benefits to a country. An interesting hypothesis is that, in assessing the growth costs of corruption, it is essential to distinguish between forms, which are highly distorting and forms,

which are not. It appears that as prices have gradually become more aligned to their international levels, the scope for corruption may have been on the wane. Finally, whether the Ukraine case provides many clues as to whether quick or slow reforms are better, remains unclear. Probably this version of the question is too simple. Perhaps the one price whose misalignment should almost certainly have been corrected immediately, had it been possible, was the real exchange rate. Many other relative price distortions could probably have been dealt with more gradually without too serious economic costs. Misalignment of the exchange rate leads to large-scale underutilization of available resources, whereas many other price distortions lead to misallocation of resources, whose impact on average tends to be much less per unit of resources involved.¹⁰

The Quantitative Dimensions of Decline and Recovery

According to official figures, that refer essentially to registered economic activities, Ukraine suffered a cataclysmic economic crash between 1990 and 1996 as GDP fell by about 57 percent and GDP per capita by only a little less because population fell by a couple of percent (see Table 1). Output continued to shrink until it finally bottomed out in 1999 at nearly 60 percent below the 1990 level. An upturn finally came in 2000-2002, with total growth of 21 percent over this three-year period. By these figures, GDP in 2002 was still only about half that of 1990 and GDP per capita about 53 percent of the 1990 level.

It is generally recognized however, that the official sector figures greatly exaggerate the output decline suffered, and that the unofficial or underground economy expanded rapidly during the period of most marked decline in recorded GDP. Two approaches to the estimation of true GDP trends have been implemented. They involve, respectively, the use of data on electricity consumption and the use of monetary aggregates to estimate trends in total (correctly measured) GDP. Together with one or more point-of-time estimates of the size of the informal sector, these estimates of true GDP allow one, by subtracting official GDP, to deduce the size of the residual level of economic activity, the unofficial sector.¹¹ Both have proven to be useful proxies for short-term trends in GDP in many countries, but their accuracy over as long a period as a decade is much more open to question.¹² Both point to the existence of a large unofficial sector by the mid-1990s and both indicate a relative shrinkage of that sector in the last few years of the decade.

¹⁰ The distinction is that between so-called “Harberger triangles” (Loss due to resources being used in a second best way) and the “Okun gap” between actual and potential output due to underutilization of resources. The first problem is microeconomic in character, the latter aggregate or macroeconomic.

¹¹ Various types of direct, micro-level evidence were used by Kaufmann and Kaliberda (1996, p. 9) to estimate the share of the unofficial sector in the economy as of the early-1990s. They undertook a variety of surveys of firms and of workers over 1992-1995. They found the implicit trends in the size of the unofficial sector (from which they could deduce the size of total GDP) over these years to be consistent with those of electricity consumption. To the best of our knowledge, such direct information on the size of the unofficial sector has not been available over the full decade, either to provide direct evidence on the longer run behavior of GDP or to verify consistency with electricity consumption or any other simple proxy for GDP.

¹² Notwithstanding the general merits of electricity consumption as a proxy for GDP growth, and the efforts of Kaufmann and Kaliberda to deal with the matter of price elasticity (they concluded that the short-run price elasticity of energy consumption was low) it is natural to wonder whether the relationship between the two variables would not have changed over the 1990s as energy prices rose dramatically.

According to an approach that Kaufmann and Kaliberda (1996) consider to be relatively conservative with respect to the size of the unofficial sector, that sector eventually either approached or exceeded half of total GDP. Table 2 uses what we understand to be their methodology and puts the unofficial share at 46.4 percent in 1997, for example. Mel'ota et al. (2001) present two series based on alternative equations that link monetary variables to GDP, beginning in 1993. If these are spliced to the Kaufmann and Kaliberda estimates for 1993, they suggest a somewhat smaller unofficial share of GDP in 1999—35.3 or 39.9 percent versus the electricity-based figure of 45.7 percent (Table 2). In 2000, however, their two estimates have risen to 38.1 percent and 43.1 percent, respectively. These authors argue that the electricity approach suggests an implausibly rapid relative decline in the unofficial sector toward the end of the decade, whereas their estimates decline more gradually but still show that sector's share to be substantially larger in 2000 than in 1993 (Mel'ota et al., 2001, p. 14). None of these estimates can be considered highly reliable, but together they create some presumption that GDP, including the unofficial sector, probably fell by 35-45 percent from its 1990 level, still a very dramatic decline. Possibly this still overstates the true decline if a substantial share of the beginning period output really had little value, but it would seem unlikely that, even adjusted for this factor, the fall would have been less than 25 percent.¹³

Table 2: Estimate of Total GDP and of Unofficial GDP, Based on the Use of Electricity Consumption as a Proxy, 1990-2002

Year	Official Economy Index	Unofficial Economy Index	Total Economy Index
1990	84.7	16.3	100.0
1991	77.33	20.5	97.8
1992	69.67	21.8	91.5
1993	59.78	24.6	84.4
1994	46.09	28.7	74.8
1995	40.47	30.2	70.7
1996	36.42	30.6	67.0
1997	35.33	30.6	65.9
1998	34.66	29.3	64.0
1999	34.59	29.1	63.7
2000	36.59		
2001	39.92		
2002	41.76		

Sources: Figures for 1990-1995 taken from Kaufmann and Kaliberda, 1996, p.14. Official sector GDP figures were deduced from UNDP percent changes over the decade and figures for electricity consumption since 1995. GDP elasticity of use of electricity was assumed to be unitary.

Given the very incomplete coverage of the official GDP estimates and the still unproven indirect estimates of true GDP, there might well remain some uncertainty about the date of the

¹³ It is also possible than the decline exceeded even 45 percent. Note that Milanovic (1998, p. 34) reports that the national accounts (that is, the official figures) indicate a decline of 64 percent in real per capita income between 1988 and 1995, whereas the household survey data indicate a fall of 62 percent. We have not been able to verify the degree to which the 1995 household survey undertaken by the World Bank was consistent with the traditional household surveys of the 1980s in terms of degree of underreporting and other problems that would lead to an understatement of average income.

beginning of the recent recovery and even about its magnitude. None of the available estimates carries our series beyond 2000, so the way the alternative methodologies predict the last two years will be revealing. Because the official figures show rapid growth, the best guess is certainly that there has been substantial growth but at a rate less than the figures suggest—in other words, it is likely that some formerly unofficial activities have moved back into the official fold at this time (see Box A for a discussion of the determinants of the size of the unofficial sector).¹⁴

Because the two techniques used to correct the official GDP figures in order to include the unofficial sector involve the use of economy-wide aggregates (electricity use and money in use), they provide no hints as to how the relative size of unofficial production differentiated by sector or type of activity. Accordingly, analysis of the sectoral pattern of economic decline and recovery is subject to equal or greater information problems than is analysis of the economy as a whole, unless it is possible to judge on the basis of other types of information where the growth of the unofficial sector was concentrated.

Box A: Composition of the "Unofficial Sector" and Determinants of Its Size

Kaufmann and Kaliberda (1996, p. 2) define unofficial activity as "the unrecorded value added by any deliberate misreporting or evasion by a firm or individual." Although there is a degree of overlap, this set of activities differs in major ways from the standard definition of informal sector activities that is commonly used in market-based developing countries. Such activities are defined by smallness (such as enterprises with fewer than 10 or 5 workers) and by use of relatively traditional technology (so self-employed computer specialists or professionals are excluded). Although some participants in the sector, so defined, have incomes greater than some workers toward the lower end of the formal sector range of incomes, average income in the informal sector is always well below the economy-wide average. The unofficial sector in post-Communist countries is usefully thought of as having three components: (1) informal activities like those just described, although not all such small-scale activities would be unofficial; (2) other unofficial but not otherwise illegal activities (see below); and (3) criminal activities, which go unrecorded. All three categories of activity exist in any developing country, but the second category stands out by its size in post-Communist countries.

Salient characteristics of the unofficial sector of Ukraine, according to Kaufmann and Kaliberda (p. 2) are the following:

- The state sector is widely connected to unofficial activities, with state officials and workers often linked to non-state activities and firms in order to operate more flexibly or to generate private income flows from state assets.
- Most activities have become unofficial to avoid the burden of administrative regulations and high taxation rates. The share of a given activity that is unofficial varies along a spectrum; most activities operate in both economies.
- Social services and state subsidies are accessible to almost all unofficial activities because of their coexistence with official activities.

¹⁴ Figures on family income levels from the household surveys taken over different periods of time also provide information on how well the economy has been doing. So do wage series (although this information is hard to interpret for reasons explained below) and various other proxies besides electricity consumption and the movement of monetary aggregates. Joint use of all of these sources would probably allow a reasonably accurate picture of what did happen to the Ukrainian economy since 1990. But, to the best of our knowledge, no attempt to employ all the various types of information together has yet been undertaken.

- The unofficial sector has a shallow character in the sense that much of the activity found there had been official and could be again in the future under changed circumstances. The size of the unofficial sector is determined largely by government-induced incentives, with the decision to be unofficial based on:
 - The degree of bureaucratic discretion, which lowers the perceived penalty of operating in the unofficial economy;
 - The strength of market institutions and the quality of the civil service;
 - The degree of administrative controls;
 - The official tax burden;
 - The degree of macroeconomic instability, which induces flight to foreign currencies, barter transactions, and the like; and
 - The type of activity, some by their character more likely to be unofficial than others.

Especially because of this last factor and probably as a result of differences across individuals in proclivity to becoming involved in the unofficial economy, there tends to be a natural upper limit to the viable share of unofficial activities. At any given size of the unofficial sector, the activities remaining official are self-selected as the ones in which it is harder to cross the line.

Based on this list of determinants, Kaufmann and Kaliberda (p. 5) opine that, of the former Soviet countries, one would expect Ukraine, Azerbaijan, and to a lesser degree Russia to have high rates of involvement in the unofficial sector.

Tax and administrative burdens have been high in Ukraine and are believed to constitute a major push for activities to become unofficial. In 1994, small enterprises were paying the equivalent of US\$ 2,000 per year in unofficial payments to get around licensing and permit requirements; the average in Kiev for SMEs (state and non-state) was US\$12,000 (p. 8), which amounted to a significant percentage of total costs. Many firms paid fees to external facilitators to resolve administrative difficulties, an average of US\$ 500 a year for small enterprises and US\$1,300 for medium-sized firms. The latter also paid an average of US\$1,200 in protection from organized or unorganized crime.

When entrepreneurs were questioned about the measures that would provide a strong incentive to return to their official economy, their responses focused on the removal of administrative controls in the trade and foreign exchange regimes and on a stable and moderate tax structure and low inflation. About 30 percent of the respondents said they would come back to the official sector within a year of the implementation of far-reaching liberalization and tax reform measures; half would do so within two years, and another third, thereafter. Only about 15 percent said they would not come back, either because they did not trust the government to maintain reforms even when begun or for other reasons.

POVERTY AND DISTRIBUTION TRENDS IN UKRAINE

The Broad Picture

Although there are many ambiguities in the details, the broad picture with respect to growth, inequality, and poverty over the last 20 years in Ukraine is clear. The 1980s saw relatively rapid growth in per capita income of 2.6 percent per year, or 33 percent in total over 1980-1991 (see Table 3). During this period, Ukraine outperformed most Soviet bloc countries. For example, whereas during 1985-1990 the bloc managed per-capita growth of just 0.43 percent per year Ukraine achieved a 2 percent rate. At the same time, reported inequality was falling significantly as the Gini coefficient of per-capita family income dropped from 0.35 in 1980 to a low of 0.22 in 1991 before beginning to rise again (see Table 4). It is doubtful that inequality would in fact have fallen this much, but we feel it is probable that it did fall to some degree¹⁵

Table 3: Annual Growth Rate of Per Capita Real Income and Components, 1980-1992

Components	1980-1985	1985-1989	1989-1990	1990-1991	1991-1992
Income Components					
Salary income	0.35	3.19	8.16	-7.54	-31.44
Collective farm income	3.51	1.68	5.16	-30.67	49.56
Government cash benefits	3.88	-1.52	12.63	45.79	-58.33
Smallholding income	4.53	-0.67	10.88	15.34	30.32
Other sources	5.37	7.16	-4.7	21.83	-26.59
Total income	1.97	2.32	7.4	2.38	-23.56
Expenditure Components					
Food	0.2	-0.51	7.61	18.74	-23.03
Non-food	1.73	2.35	13.86	5.39	-24.62
Alcohol	0.58	1.4	16.22	-20.93	-23.53
Social expenditure	0.91	3.76	-2.29	-21.09	-54.46
Taxes	1.6	4.09	6.48	-27.83	-21.69
Other expenditures	5.79	4.42	-17.46	11.54	-18.97
Savings	12.04	8.91	14.47	-16.48	-7.89
Total expenditure	1.97	2.32	7.4	2.38	-23.56

Source: Kakwani, 1995, p. 15.

The substantial economic growth together with the significant fall in inequality led to a sharp decline in the poverty head count over the 1980s (Table 5). Using the poverty line adopted by Kakwani (1995), the reported fall was from 38 percent in 1980 to 11.5 percent in 1990 and 8.8 percent in 1991, before the sharp rise began in 1992 (back to nearly 30 percent in that year). The share of families who were ultra-poor fell from 23.2 percent in 1980 to 3.2 percent in 1991

¹⁵ The figures for 1991 and 1992 probably understate the true level of inequality, for several reasons (see Appendix A); they are very low by international standards, including those of the Communist countries (Kakwani, 1995, Table 20). The degree of understatement of inequality has probably also changed over time, but given that the approach seems to have been broadly the same over the 1980s (and previously), it seems likely that there was in fact a considerable decline in inequality and in poverty over the 1980s, even if it was probably substantially less than the figures show.

before rising to 16.9 percent in 1992. Kakwani's interpretation of the decline in measured inequality during the 1980s and the correspondingly rapid fall in reported poverty emphasizes that the income gap between the families of state and collective farm workers and those of industrial workers narrowed substantially and that the pensioner families of both blue and white collar workers and collective farms saw a relative income gain compared with industrial workers.

Table 4: Indicators of Income Inequality in Ukraine, 1980-1992

Quintiles	Years					
	1980	1985	1989	1990	1991	1992
1 st	8.13	7.09	9.41	10.35	11.01	10.56
2 nd	13.04	14.83	13.99	14.31	14.72	15.53
3 rd	16.04	16.37	17.37	17.51	17.82	16.07
4 th	19.83	20.51	21.33	22.83	23.99	23.69
5 th	42.96	41.20	37.90	35.00	32.46	34.15
Gini Index	34.64	32.16	26.50	25.13	21.80	23.40
Decile Distribution Ratio	49.28	53.20	61.74	70.46	79.27	76.40

Source: Kakwani, 1995, p. 21.

Table 5: Indicators of Poverty in Ukraine, 1980-1992 (selected years)

Year	Poor			Ultra Poor		
	Poverty Line in Current Prices	Head Count Ratio	Poverty Gap Ratio	Poverty Line in Current Prices	Head Count Ratio	Poverty Gap Ratio
1980	88.00	38.04	11.37	72.90	23.23	7.30
1985	91.60	28.37	7.55	75.80	14.41	4.67
1989	96.00	17.93	4.18	79.50	8.56	2.30
1990	100.40	11.53	2.29	83.10	5.49	1.01
1991	188.00	8.76	1.33	155.70	3.20	0.43
1992	2,845.80	29.75	6.86	2,356.40	16.88	3.45

Source: Kakwani, 1995, p. 37.

The transition period since 1990, during which reforms have been undertaken albeit in an erratic and on average very gradual way, saw the economy contract dramatically and inequality rise. GDP probably fell by 35-45 percent and per capita income by a little less. The trajectory of income and expenditure inequality is no less blurry than that of per-capita income, but this inequality seems to have risen substantially. With the economic collapse and the increase in inequality, the poverty incidence shot up, probably not nearly as much as the gap between the 2

percent reported by Milanovic (1998, p. 68) for 1987-1988 and the 63 percent for 1995 (see Table 6) but still very seriously, as discussed below.¹⁶

Table 6: Estimated Poverty Headcount and Poverty Deficit in 1987-1988 and 1993-1995 Using Household Budget Survey Income Figures: Former Soviet Bloc Countries and Comparators

Country	Poverty Headcount (%)		Total Number of the Poor (millions)	
	1987-1988	1993-1995	1987-1988	1993-1995
<i>Balkans and Poland</i>	5	32	3.60	22.40
Bulgaria	2	15	0.10	1.30
Poland	6	20	2.10	7.60
Romania	6	59	1.30	13.50
<i>Central Europe</i>	<1	2	0.10	0.40
Czech Republic	0	<1	0.00	0.10
Hungary	1	4	0.10	0.40
Slovakia	0	<1	0.00	0.00
Slovenia	0	<1	0.00	0.00
<i>Baltic states</i>	1	29	0.10	2.30
Estonia	1	37	0.02	0.60
Latvia	1	22	0.03	0.60
Lithuania	1	30	0.04	1.10
<i>Slavic republics</i>	2	52	3.50	112.10
Belarus	1	22	0.10	2.30
Moldova	4	66	0.20	2.90
Russia	2	50	2.20	74.20
Ukraine	2	63	1.00	32.70
<i>Total without Central Asia</i>	3	43	7.20	137.20
<i>Central Asia</i>	15	66	6.50	30.70
Kazakhstan	5	65	0.80	11.00
Kyrgyz Republic	12	88	0.50	4.00
Turkmenistan	12	61	0.40	2.40
Uzbekistan	24	63	4.80	13.30
<i>Total transition</i>	4	45	13.60	168.00
Comparators				
Brazil	33		48.30	
Colombia		35		11.60
Ecuador		35		3.90
Paraguay		44		2.10
Malaysia	31	18	5.10	3.60
Turkey	31		16.70	
United Kingdom	1	<1	0.60	0.50

Source: Milanovic, 1998, pp. 68-69. Original sources are cited there.

The details and the timing of changes in inequality and poverty during the early 1990s, with the dramatic collapse of the economy, massive shortages and the associated large “monetary

¹⁶ Milanovic does not suggest that such a large increase occurs, emphasizing that the earlier sample was more biased against including the poor than was that of 1995.

overhang” will probably never be known. The first more modern household survey of the 1990s took place in 1995, by which time the worst of the crisis was past. But even if surveys had been taken during the previous years, they would be very hard to interpret. In addition to all of the other statistical problems discussed here, when people have money with which they cannot buy goods because of rationing, data on per capita income loses much of its meaning and even consumption data becomes somewhat fuzzier.

Since 2000, growth has returned to Ukraine. The important questions of interest here relate to this recent growth process. What are its sources, and is it likely to be sustainable? Is it pro-poor in pattern and in its impacts on inequality and poverty? Is either the growth or its degree of pro-pooriness causally related to government policy or results more from other factors such as the recession finally having run itself out, for example? In the wake of the disastrous economic crash and partial transition of the 1990s with the probably huge increase in poverty that accompanied them, the challenge for the future is enormous. The worst fear is that a distinctly anti-poor process of governance (or lack thereof) has been established that will be hard to root out. The character of that governance has been in many ways both anti-growth and anti-equality.

The 1990-1999 Period

Evolution of Inequality

Piecing together the inequality and poverty story for Ukraine since 1990 requires one to rely on non-comparable household survey information. Data can be taken from the traditional household budget surveys (used by Kakwani, 1995, for example), a 1995 survey undertaken with the collaboration of the World Bank and other institutions (World Bank, 1996), and the methodologically revamped series of household budget surveys launched in 1999. Appendix C presents details on four sources of poverty information in Ukraine, including definition and methodology issues.

An injudicious reading of the evidence would lead to the conclusion that there was an enormous increase in inequality between the late 1980s and the mid-1990s (like the leap from a Gini coefficient of 0.23 in 1987-1988 to that of 0.47 in 1995, reported by Milanovic [Table 7]), followed by an almost equally sharp fall in inequality between that time and the end of the decade, when the Gini coefficients from the new household surveys were 0.30 when data are aggregated over four quarters and a little higher for quarterly data. A more careful reading suggests that a significant increase in inequality did occur as the crisis hit, but probably a rather smaller one than implied by the above figures, and that there may have been some decline thereafter, although this remains quite unclear because of anomalies in the information. Future trends will, we hope, be more accurately traced out by the data from the new series of household surveys inaugurated in 1999, which have good continuity and do not suffer some of the weaknesses of the earlier series; even they, however, are very deficient in the recording of incomes.

Consider first the question of what happened to inequality in the early 1990s as per capita income was plummeting. Both the traditional survey (the only source of information of inequality prior to 1995) and the World Bank's 1995 survey (World Bank, 1996) refer mainly to the distribution of per-capita family income. The 1995 sample is representative, which has the effect of producing a more accurate measure of inequality, whereas the traditional series was downward biased on this count. The 1995 survey collected monthly data, which tend to show a higher level of inequality than would data corresponding to a yearlong period. Milanovic (1998, p. 148) considers this survey to have the same degree of under-inclusion of the poor as would its typical counterpart in a developed market economy, so it should not understate income inequality too much for that reason. Income underreporting does, however, appear to be very serious in the surveys begun in 1999 and was even more so in 1995, judging by the fact that reported expenditures were on average an astronomical 2.1 times average reported income in that 1995 survey.

Table 7: Changes in Inequality during the Transition, Former Soviet Bloc Countries

Country	Gini Coefficient (annual) ^a		
	Income Per Capita		Expenditures Per Capita
	1987-1988	1993-1995	1993-1995
<i>Balkans and Poland</i>	24	30	
Bulgaria	23 ^b	34	
Poland	26	28 ^e	31 ^e
Romania	23 ^b	29 ^c	33 ^c
<i>Central Europe</i>	21	24	
Czech Republic	19	27 ^c	
Hungary	21	23	27
Slovakia	20	19	
Slovenia	22	25	
<i>Baltics</i>	23	34	
Estonia	23	35 ^d	31 ^d
Latvia	23	31 ^d	
Lithuania	23	37	
<i>Slavic republics and Moldova</i>	24	40	
Belarus	23	28 ^d	30 ^d
Moldova	24	36	
Russia	24	48 ^d	50 ^e
Ukraine	23	47 ^c	44 ^c
<i>Central Asia</i>	26	39	
Kazakhstan	26	33	
Kyrgyz Republic	26	55 ^d	43 ^d
Turkmenistan	26	36	
Uzbekistan	28 ^b	33	
<i>All transition</i>	24	33	

Note: For most countries, income concept in 1993-1995 is disposable income; in 1987-1988, gross income. Personal income taxes are small, and so is the difference between disposable and gross income. Income includes consumption-in-kind, except for Hungary and Lithuania in transition years. Regional averages are unweighted.

^aExcept when stated otherwise

^dQuarterly

^b1989

^eSemiannual

^cMonthly

Source: Milanovic, 1998, p. 41. Calculated from the countries' household budget surveys. All expenditure data obtained from the same surveys as income data.

In market-developing economies, such a huge level of income underreporting would be associated with a downward bias in estimated inequality because the rich tend to underreport more than do other groups, partly because a higher share of their income is from capital and this form of income tends to be poorly reported in general. In Ukraine, one would in any case expect a high degree of underreporting by the rich because a high share of their income is improperly gained. These considerations would suggest that, in spite of the upward bias from the short reference period, income underreporting might imply a large net downward bias in measured inequality and that the true Gini coefficient might, for example, be at 0.5 or above. For lack of detailed analysis in Ukraine or other former Soviet bloc countries, one cannot be sure that underreporting would be greatly different across income classes, but the illicit character of much income, and the prevalence of expensive cars on the streets of Kiev argues strongly in this direction.. A reasonable guess, then, is that as of 1995 the Gini coefficient of per-capita family income was 0.45-0.55, a figure that would put it above most developing countries and squarely in the range of many Latin American countries. .

Several methodological differences must be taken into account in comparing the 1995 survey results with those of the new series begun in 1999, which have generated Gini coefficients for the expenditures distribution of 0.3. Recent analysis of poverty and inequality in Ukraine have, appropriately enough, focused mainly on expenditure data, partly because such data provide a more meaningful indication of the levels of inequality and of poverty (since expenditure data more accurately reflect what a household is in fact consuming) and partly because expenditure data, especially if the survey is taken with some care, are more accurate than income data, which almost always understates that variable substantially. It is likely that consumption is less accurately reported in a country like Ukraine even now than in most market economies, especially in the upper-income groups, hence probable that the true expenditure Gini is at least several percentage points above the recorded one. In market economies, the Gini coefficient of the distribution of expenditures is typically 4-5 percentage points below that of the distribution of income.¹⁷ Applying this same adjustment in Ukraine, together with an upward adjustment of presumed differential underreporting of expenditures, would suggest an income distribution Gini of around-0.40 at this time.¹⁸ Superficially comparable guesses for 1995 and for 1999-2002 thus suggest a considerable decline in inequality during the late 1990s. Some observers, however, suspect that the recent household surveys greatly underreport the income of the very rich (and perhaps also the very poor—Thirsk, 2003b). This, together with the higher reported Gini from the 1995 survey and the lack of obvious reasons to expect a large fall in inequality during that interval, argues for the view that the Gini coefficient of the income distribution may be closer to the neighborhood of 0.5.

¹⁷ Lack of comparable analysis on this point for socialist or ex-socialist countries means that the validity of the presumption of a similar relationship between the two measures must be taken with some caution in that context.

¹⁸ An additional factor that probably biases the 1999 and on results downward relative to earlier ones is the use of family expenditure per-adult equivalent rather than per-capita family expenditures as the criterion for ranking families and comparing their economic status.

Evolution of Poverty

With a sizable fall in per-capita income and an apparently considerable rise in inequality, poverty incidence increased markedly in the 1990s. The bulk of the increase in poverty occurred during the first half of this dark decade of Ukrainian history, when both the decline in per-capita income and the increase in inequality were concentrated, according to the available data. Beyond this, it is impossible to be very precise about the trends, given the changing and inconsistent sources. Still, a simple disaggregation of the extent to which the increase in poverty over this period was the result of the economic collapse as opposed to rising inequality may be effected by asking the question, If there had been no change in the distribution of income (so that all groups would have suffered the same decline), by how much would the incidence of poverty have risen? If in fact per-capita income fell by 50 percent, poverty would have risen from the level of 11.5 percent in 1990 to about 70 percent.¹⁹ Had per-capita income fallen by 40 percent (more likely according to the discussion above), poverty would have risen to about 55 percent from its initial 11.5 percent.

The 1995 survey results, analyzed by the World Bank (1996), demonstrated a poverty incidence of 29.5 percent in that year but with a much lower poverty line than that used by Kakwani (1995). The figures based on the household surveys beginning in 1999, with a slightly higher poverty line, have been in the same range, suggesting only moderate changes in the incidence of poverty over the last part of the decade. Assuming there was a significant increase in inequality over the first part of the 1990s, with a 40 percent decline in average income the poverty incidence would have increased faster than the above simulation suggests, presumably to 65-70 percent, using the 1990 poverty line.

The proposition that poverty skyrocketed so dramatically during the early 1990s must be considered unproven, however, for two reasons. First, the only observation (to our knowledge) that points to exceptionally high levels of inequality is the 1995 World Bank-supported survey (World Bank. 1996). Second, the fact that rural and urban households were not far apart in average income does not seem fully consistent with such a view. It is possible that inequality as of 1990 was much higher than some estimates suggest (in fact, the figures for 1980 and 1985 [Table 3] are surprisingly high for a Communist country, given their known downward biases).

Taking the decade as a whole, if one assumes that the 1999-2002 Gini coefficients of income distribution are at least somewhat higher than the true Ginis for consumption distribution, which in turn are considerably higher than the reported figures of around 0.3, and thus probably at least 0.40 (and probably higher), it would appear implausible that the full difference between this figure and the income inequality of 0.25 reported for 1990 (Kakwani,

¹⁹ Average per-capita income (Kakwani, 1995, p. 14) adjusted from 1980 to 1990 prices was 181.9 in 1990 and the poverty line (p. 37) was 100.4, that line was a little over half of average income. The average income of the bottom quintile was also just over half of the overall average income. With the poverty line just a few percent above the average of the bottom quintile, this explains why a bit over half of that quintile (11.53 percent of the population) was in poverty. If the income level constituting the dividing line between the third and fourth quintiles was half way between the average incomes, of those two quintiles, it would have been 182 in 1990. If it had fallen by half as of 1995, it would be at 91, a little under the poverty line, so one may conclude that all of the bottom three quintiles and part of the fourth, say 70 percent of the population, would have been in poverty. Had income fallen by an average of 40 percent, a parallel calculation implies that 55 percent would have been in poverty.

1995, Table 9) could be accounted for by differences in the sampling approach, significant as these may have been. It seems certain, therefore, that there was a major net increase in inequality over the decade as a whole and a perhaps larger one during the first half of it, and that this contributed along with the sharp (or traumatic, depending on which estimates one believes) fall in average income to a large increase in poverty. Though the precise record on the evolution of poverty during the 1990s will probably remain permanently ambiguous, there is no doubt that the increase was very large.. The share of the population slipping below any reasonably defined poverty line during the 1990s debacle was guaranteed to be substantial given the large decline in per capita income and the fact that, pre-recession, many families were not too far above the poverty line.²⁰

The 1999-2002 Period

Fortuitously, the economic upturn beginning in 2000 coincides with the existence of new and somewhat better data on economic inequality and poverty. The primary source of comparable household income and expenditure data is the State Statistics Committee of Ukraine's new Household Budget Survey, conducted quarterly since 1999. The methodology of the Household Budget Survey was revamped to make it more consistent with international standards.²¹ Despite these improvements, the information still suffers from significant weaknesses, making it difficult to know what has happened even in these last years (see Appendix A). Partly, this is a natural outcome when the new household survey system is so recent and has thus not yet been subjected to much analysis about how well it is working, what its gaps are, etc. Partly, it reflects the complexities of an economy in transition. Much of the data complementary to household surveys in market economies either are not available in Ukraine or, if so, have a different coverage and meaning. Accordingly, there is uncertainty as to whether recent growth has coincided with a considerable decrease in poverty, as would be expected given the reported growth of GDP.

Inequality and Poverty Trends Accompanying the Recent Economic Upturn

The puzzling anomalies of the data on consumption and income notwithstanding, it may be that the data for the years since 1999 are reasonably comparable so that they would reflect any major changes in the levels of inequality and poverty. The most direct evidence bearing on changes in poverty incidence comes from changes in absolute consumption of those groups close to the poverty line. In parallel, changes in the severity of poverty can be deduced from changes in the absolute consumption of those below the poverty line. From the published data,

²⁰ As Hansen (2003) emphasizes, real income levels were never better than modest. It is easy to overstate the purchasing power of incomes expressed in local currency given the massive shortages which frequently obtained.

²¹ In practice, very little in-depth analysis is conducted with pre-1999 data. Importantly, data from the pre- and post-1999 Household Budget Survey are not comparable. The new Household Budget Survey sampling frame was designed based on residence because workplace surveys are not sufficient to capture nationwide trends in income and consumption in a post-transition economy with reduced labor force participation rates and open unemployment. Other survey improvements include regional probability sampling, resulting in a sample of 9,435 households.

one can estimate the average consumption of the person at the 30th percentile of the consumption distribution, which is approximately the poverty line. Those data indicate that aggregate average expenditure of all families rose by 5.3 percent in 1999-2001, although it did fall from 1999 to 2000. Approximating the income of the person at the 30th percentile by the average of the ratio of the third and fourth deciles to the overall average, we conclude that the person at the 30th percentile gained by 4.4 percent over the two years, although suffering a loss in 2000.

Taking the real average consumption data from the household surveys and the per-capita GDP figures from the national accounts at face value, it is surprising that the former rose so much less than the latter. This discrepancy could be the result of any combination of four sources: (1) inaccurate data; (2) a sharp increase in the average family savings rate; (3) a difference between the rate of growth of family income and that of GDP; and (4) differences in the rate of change as between the price deflators for GDP and the private consumption (the consumer price index). There is little doubt that as recovery occurs the ratio of output captured in the national accounts to true output will rise as the relative size of the underground economy shrinks. If this has been happening over the 1999-2002 period, true incomes may be rising less than reported (national accounts) ones, and this could help explain the apparently slower increase in consumption, measured directly from the household surveys, than the increase in national per-capita income based on the national accounts.

The expenditure distribution data of Table 8 suggest a modest increase in inequality in Ukraine between 1999 and 2000 and no significant increase since then, despite high levels of economic growth which might be expected to further increase inequality under the current conditions of the Ukrainian economy. The reported Gini coefficient for the first half of 1999 was 0.29; comparing expenditure data by decile from 2000 to 2002 shows a coefficient virtually unchanged at 0.29-0.33. The bottom three deciles together suffered a loss in consumption share from 14.8 percent in the first half of 1999 to 13.9 percent in the first half of 2002. There was a mild redistribution to the top decile. The fact of relative distributional equality, especially around the poverty line (assuming it to be around the ceiling of the third decile) implies that income-poverty would have fallen significantly in the case of a rise in average per-capita income of 15 percent, equal to the increase in per-capita official sector GDP over that period.²² If savings rates were changing for persons around the poverty line, poverty measured by consumption might behave differently from that defined by income. In any case, the faster growth of income (at least judging by GDP per-capita trends) provides some additional support for the proposition that poverty has been falling.

²² With a poverty line of 0.575 times average expenditures in 1999 (that is, at the 30th percentile of the distribution) and with a per-capita income increase of 10 percent (15 percent) between 1999 and 2002, the poverty incidence would have fallen by 4-5 percentage points (7 percentage points).

Table 8: Expenditure Distribution by Deciles, Households Ranked by Per-Adult Equivalent Expenditures, 1999-2002

Decile	1999 First Half	2000 Second Quarter	2000 Full Year	2001 Second Quarter	2001 Full Year	2002 Second Quarter	2002 First Half
First (poorest)	3.50	3.10	3.60	3.10	3.50	3.10	3.30
Second	5.10	4.60	5.10	4.60	5.00	4.60	4.80
Third	6.20	5.70	6.20	5.60	6.00	5.60	5.80
Fourth	7.10	6.70	7.10	6.60	7.00	6.70	6.80
Fifth	8.20	7.70	8.10	7.60	7.90	7.70	7.80
Sixth	9.10	8.90	9.20	8.80	9.10	8.80	8.90
Seventh	10.50	10.30	10.40	10.30	10.40	10.30	10.30
Eighth	12.20	12.10	12.10	12.20	12.20	12.00	12.00
Ninth	14.70	15.20	14.80	15.00	14.90	14.80	14.70
Tenth (richest)	23.40	25.70	23.40	26.20	24.00	26.40	25.60
Gini Coefficient	0.29	0.32	0.29	0.33	0.30	0.33	0.31
Ratio of 10th to 1st	6.71	8.40	6.40	8.50	6.90	8.5	7.8

Source: State Statistics Committee of Ukraine.

Given the uncertain data quality, it is useful to consider other types of information that may provide hints about how inequality and poverty have behaved over the last few years. One possibly relevant source is the data on wage trends. Two alternative estimates are presented in Table 9. The first comes from wage data available from the National Bank of Ukraine (NBU) website (NBU Main Social and Economic Indicators tables). According to this series, real wages broadly followed the movements of GDP per capita with a 75 percent drop over 1991-1994, no net change between 1994 and 2000, and a net increase of about 33 percent from 1999 to October 2001, leaving wages still at just one-third of their 1991 level. We have also tried to estimate real wages directly, using the NBU's nominal wage series and the consumer price index. This procedure should in principle reproduce the NBU series but, for reasons we do not understand, our series behaves differently from the published NBU one, showing a larger increase over the last three years.

Table 9: Real Wages in Ukraine, 1991-2002: NBU Series and Authors' Calculations

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002 (October)
Year on year		61.3%	48.5%	85.4%	128.1%	86.2%	97.6%	87.1%	103.4%	103.6%	120.4%	106.5%
Base 1991, NBU	100	61.3	29.7	25.4	32.5	28.0	27.4	23.8	24.6	25.5	30.7	32.7
Base 1999, NBU	405.7	248.7	120.6	103.0	131.9	113.7	111.0	96.7	100	103.6	124.7	132.8
Base 1999, authors' calculations				167.4	126.4	110.2	109.0	95.9	100	107.6	129.5	136.8

Source: National Bank of Ukraine (www.bank.gov.ua)

Despite our failure to understand how the NBU calculates the real wage series, both its series and ours show a very large increase in real wages in recent years; in fact, such a sharp rise might be too large to be plausible (more the double the registered increase in per-capita income over the same period) were it not for the dramatic decline in recorded wages in the previous

period. In any case, the wage data provide further support for the proposition that poverty has been falling since 1999. (For more details, see Box B). Note that, as of 1999, the average wage was about twice the poverty line. This suggests that, with an employment to population ratio of 40 percent, a family with 40 percent of its members working and getting the average wage would have a wage income at 80 percent of the poverty line. That average wage family would also have other sources of income, which would probably bring total income to above the poverty line. If this were the case, movements in the average real wage should give some indication of what is happening to families that are not far from the poverty line, as long as wage and income structure are not changing much.²³

Box B: Wage Data and their Interpretation in Relation to Poverty

Data on the patterns and trends of real wages often provide not only a window into how the labor market is functioning but also a valuable complement to income and expenditure data for purposes of analysis of inequality and poverty and their trends. Given the serious deficiencies and ambiguities in the latter data for Ukraine, it is an obvious recourse to pursue. The real wage data for the official economy (no wage data exist for the unofficial economy) suggest a decline that is comparable to that of official GDP per capita (see Table 9). Frequently over the last decade, however, reported wages have overstated actual wages as a result of wage arrears (see below). At the same time, there is anecdotal evidence that recorded wages also often understate the true payments, so it is not clear which way the net bias may go. Meanwhile, the GDP figures overstated the decline by a good deal as the underground or informal sector grew. Household survey data, however, do confirm that wages fell as a share of reported family income, at least between 1990 and 1995 (Table Box B-1); for all families (rural and urban together), the decline was from 68 percent in 1990 to 43-44 percent in 1995-1997. Although income is strongly underreported in these surveys, this pronounced decline in the numbers must reflect a real shift in the indicated direction. It fits into the general pattern in which true GDP fell less than official GDP and true income fell less than wage income, mainly because of the income from household plots and an increase in second jobs.

It is reasonable to expect that there were important changes in income distribution over this period, not only in the average degree of inequality but also in the relative positioning of different groups. Taking the wage data literally (Table 9) would suggest that a family dependent essentially on wages fared considerably worse than the average. Pensioners certainly did according to all reports. Those who were able to supplement or replace wage income with earnings from underground activities could have done considerably better than average. Those working in agriculture, traditionally disproportionately represented in the lower deciles of the distribution, saw their reported real wages fall not only dramatically in absolute terms but also relative to the average for all wage earnings, the opposite of the trend observed during the 1980s when the more rapid rise in agricultural wages was one factor contributing to falling inequality according to the figures available. But in 1990-1997, the share of income from household plots rose dramatically, according to the figures of Table Box B-1), essentially making up for the fall in the wage share of income. This dramatic increase was observed for rural families but not (apparently) for urban ones, even though many did have small plots. The increase in the share of household plots' contribution to total income may, however, be overstated between 1990 and 1992 through market valuation of the output of those plots, beginning in 1992. The details of what did in fact happen both to wages paid and to their share of family income remains obscure, given the lack of reliable data and the dearth of analyses.

²³ In Ukraine, the economically active population is defined as between the ages of 15 and 70. In 1999, this was 36.5 million, of which 20 million were employed, 2.7 million were unemployed, and 13.8 million were economically inactive (that is, neither employed nor unemployed). Since the total population was 50 million, the ratio of employed persons to total population was 40 percent.

Table Box B-1: Selected Indices of Average Household Incomes in Ukraine, 1990-1997

Population and Year	Source of Income				
	Wages and Salaries	Pensions and Subsidies Plots	Household Plots	Other Sources	All Sources
Average Annual Per-Capita Income (in percent of total)					
All Families					
1990	68	13	10	9	100
1995	43	9	32	16	100
1997	44	10	27	19	100
Urban					
1995	66	10	4	20	100
1997	64	11	4	21	100
Rural					
1995	22	8	57	13	100
1997	23	9	53	15	100
Urban, 1997					
Income < UAH 30 ^a	57	9	3	31	100
Income > UAH 210 ^b	70	10	2	18	100
Rural, 1997					
Income < UAH 30 ^a	38	19	10	33	100
Income > UAH 210 ^b	17	7	66	10	100
Average Annual Family Income^c in 1997 (in hryvnia)					
Urban, 1997	2,294	398	124	761	3,577
Rural, 1997	945	350	2,149	633	4,077

^a200,000 urban out of the total of 34.4 million and 200,000 out of 16.3 million rural inhabitants.

^b2.7 million urban and 900,000 rural inhabitants.

^cFrom all sources.

Sources: Van Atta, 1998, p. 607. Compiled from *Biudzhety*, 1996, pp. 17-20 and 1998, pp. 5-6, 19-21; and *Statystychnyi*, 1996, p. 390.

Life expectancy did fall during the early 1990s, especially for men (see Table 10), and the falling rate of pre-primary school enrollment also showed the stress of the times. Recent recoveries further confirm that economic turnaround.

Thus, all the evidence points in the direction of nearly constant consumption distribution and falling poverty incidence since 1999, suggesting that growth has been at least reasonably pro-poor. However, the various pieces of information suggest different levels of poverty decline, and it is not clear whether they are internally consistent or not. Thus, it is impossible to reach any firm conclusion about how pro-poor this recent growth spurt has been. Reaching reliable conclusions would require better data and a more detailed analysis of them than we or others have been able to do.

The Labor Market Since 1990

Total recorded official employment contracted by 14 percent between 1990 and 1999, while GDP was falling by substantially more. Official sector employment fell fastest in agriculture and industry; in the former, the decline was at least partially offset by an increase in labor inputs on household plots. Employment expanded in the services. Structural changes in Ukrainian industry during the transition have involved a shift away from heavy engineering in favor of food processing and light industry (textiles garments, leather, glassware, and china). This shift will create employment.

Table 10: Social Development Indicators, 1990-2002

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Life expectancy (years) (3)													
Male	65.4	64.7	63.9	63.3	62.5	61.3	61.6	61.9	62.7	62.7	62.4		
Female	74.9	74.3	74.1	73.4	73	72.6	72.8	73	73.5	73.7	73.6		
Share of pensioners in total population		25.3					28.4	28.6	28.9	29.1	29.4	29.5	29.9
Gross enrollment rate (2)													
Pre-primary	88.4	85.3	58.4	56.3	53.3	50.6	48.2	45.8					
Primary	88.8	89.1	88.0	86.8	84.5	82.8	82.0	82.0					
Secondary	92.8	90.9	90.6	91.2	92.0	92.6	93.0	..					
Share of children enrolled in preschool (4)	57					44					40	**39	

(2) World Bank, *World Development Indicators 2002*, CD-ROM.

(3) UNDP, *Ukraine Human Development Report 2001*.

(4) State Statistics Committee, *Ukraine Yearbook 2001*.

** the 2001 aggregate rate of 39 percent masks large regional differences of 51 percent urban and 18 percent rural.

Average labor productivity probably fell by a quarter over this period; in some cases this decline took the form of disguised unemployment. The ILO Ukraine Labor Flexibility Survey (ULFS) of 2000 found low capacity-utilization rates; more than one-third of firms reported they could maintain their current levels of production with fewer workers (Standing and Zsoldos, 2001). A main response to surplus labor has been to put workers on unpaid or partially paid administrative leave. From the firm's perspective, this approach is preferable to outright retrenchment because it avoids the severance pay mandated by Ukrainian law. Under the Employment Law of Ukraine, a worker on unpaid leave is not allowed to receive unemployment benefits and thus does not show up in the unemployment statistics, but constitutes a form of hidden unemployment. In addition to full administrative leave, workers are put on short-term work schedules.

According to the ILO's *Ukraine: Country Employment Policy Review* (1998), the number of workers put on administrative leave in 1996 was 3.4 million, or 23.4 percent of all workers. In 1997, this figure decreased to 2.9 million, of whom almost one-third were on leave for more

than one month. Another 2.1 million workers were made part-time in 1997—16.1 percent of the total workforce—so up to 38 percent were partially redundant or disguisedly unemployed in 1997. The 2000 Ukraine Labor Flexibility Survey found that in March 1999 47.1 percent of all factories had some workers on administrative leave; in March 2000, this figure was 46.8 percent. Of firms that resorted to administrative leave, the average share of the workforce affected was 37.7 percent in March 1999 and 35.5 percent in March 2000.

Workers have often chosen to remain on administrative leave because they hope the status is temporary and because if they resign (as some do after a period) they are not entitled to severance pay or to the higher income support, whereas the unemployed category is reserved for workers displaced for “economic or organizational” reasons. There is no special social protection for workers on administrative leave. They do, however, continue to have access to most if not all of the social services provided by the company such as housing (including utilities), health clinics, child care, etc. They also continue to accumulate “years of service” towards retirement. The social stigma of being formally unemployed was avoided by remaining on the payroll. Some workers continued to work even though they were paid nothing or received wages in kind in the form of tires, sacks of sugar, bicycles, or whatever the factory happened to be making but could not sell. Administrative leave allowed them to hold down two jobs: one with benefits, and another (often in the shadow economy) without benefits but with income (Hansen, 2003). Another institutional feature that has contributed to hidden unemployment is the high level of maternity leave, sometimes lasting two to three years. In 2000, 8.3 percent of all female workers were purportedly on maternity leave (3.7 percent of the total workforce), a suspicious figure given Ukraine’s low and falling birthrate.

Overall, labor surplus has been substantial. It has taken a variety of forms, constituting a reasonable pattern for sharing the losses associated with the economic crash.

Wage Trends and Patterns

The official wage series shows the same dramatic decline over the 1990s as do the GDP figures. These official wage data, however, must be viewed as approximations. They refer to contracted wages rather than wages actually paid. On the one hand, the tax-based incomes policy (involving a punitive tax on wage increases above a specified level) encourages underreporting of wages. On the other hand, the wage reported is often not the wage paid because of non-payment and wage arrears. Both of these factors have contributed to a shift away from money wages to non-monetary forms of remuneration, including non-wage benefits (such as social service functions) as well as payment in kind with the products of the enterprise, which the workers must then try to sell informally if they do not consume it. Bilash (2000) illustrates this growing trend of payment in kind with his analysis of the sugar market. Whereas in 1997 about 97 percent of sugar beet sales were to sugar-processing plants, 2 percent by barter agreements, and other channels were insignificant, just two years later in 1999 only 25.4 percent went to those processing plants, 40.7 percent took the form of barter agreements, 22 percent was sold on city streets, and 12 percent was given to employees as payment in kind.

The inability of enterprises to pay their wage liabilities has also been manifested in wage arrears, which became widespread during the second half of the 1990s. In September 1996, according to data of the State Statistics Committee, such arrears had reached UAH 3.2 billion (nearly US\$1.8 billion), after increasing by 2.7 fold since the beginning of that year. By early 1998, the figure stood at over UAH 5 billion, an amount exceeding a six-month wage bill for the entire country. In total, nearly 200,000 enterprises reported an inability to keep current with their wage payments (ILO, 1998). The level of arrears has been dropping with the renewed economic growth of the last few years, by 44 percent over 2001, for example.

Although detailed analysis of available wage statistics in Ukraine has been limited, the Ukraine Labor Flexibility Survey reported that the transition led to an erosion of the old wage-tariff system, with its emphasis on leveling; one result was the emergence of a category of industrial workers paid too little to allow for subsistence. In part, this was the outcome of a process in which some groups were paid very low wages to enable management to pay higher wages to other groups but yet not push the average wage high enough to trigger significant payroll tax obligations.

Who Are the Poor in Ukraine?

Unemployment helps push some Ukrainian families into poverty, but most fall in the category of the working poor. The incidence of poverty is higher in households with high dependency ratios (that is, large numbers of children and elderly) and in households with low educational attainment, as well as in those suffering unemployment. Ukraine is different from other developing and transition economies in that poverty does not appear to be concentrated particularly in rural areas; some data in fact suggest the opposite, at least in recent years.

The Unemployed. The statistical link between unemployment and poverty is clear, in that families suffering unemployment are more likely to be poor than other families and in that rising rates of unemployment (official as well as concealed) over time, and especially rising rates of long-term unemployment, show up in a higher incidence of poverty. The long-term unemployed either lose their entitlement to unemployment benefits or receive only a fraction of earlier benefits, inadequate as they may be. The World Bank's 2001 study (of 1999 official data) found that the incidence of poverty among families with unemployed household heads was 37 percent. That this percentage was not higher is due in part to the formal unemployment of non-household heads in some cases and to informal activities of household members (including the unemployed head) in others.

Open unemployment measured in an annual Ukraine labor force survey, conducted in October and based on the standard ILO definition (without a job and actively searching for work during the reference period), has been rising since the first survey in 1995, reaching a level of 11-12 percent in recent years (Table 11). The official unemployment rate, based on those who register themselves as jobless at official employment offices, tends to be low in Ukraine (and indeed in other transition economies), where the incentive to register as jobless is low—for

example, as a result of poor benefits or limited job placement assistance.^{24,25} But this rate also has been rising in recent years. About 10 percent of poor families have unemployed household heads.²⁶

Table 11: Unemployment in Ukraine, Official and ILO Definitions, 1993-2001

	1993	1994	1995	1996	1997	1998	1999	2000	2001
Registered	0.4	0.4	0.6	1.5	2.7	4.3	5.5	5.4	4.8
ILO			5.6	7.6	8.9	11.3	11.9	11.7	11.1

Source: ILO LABORSTA database.

Pensioners share with the unemployed the problem of not being in a position to earn a living from formal sector work, though many do still work actively in other pursuits. The share of the Ukrainian population classified as pensioners has been steadily increasing, from 23.6 percent in 1986 to 29.9 percent in 2002 (State Statistics Committee, 2002).

Governments often link the minimum pension to the official poverty line (as in the Czech Republic, Hungary, Poland, Russia, and Slovakia) under the logic that one- or two-person pensioners' households with no dependents and no other sources of income should be able to avoid poverty. Things do not always work out this way, of course. Sometimes the minimum pension linked to the poverty line is a full-entitlement pension, but disability, social, family, or early-retirement pensions may be below this level. The vagaries of slow indexation or delays in pension payments sometimes push pensioners below the poverty threshold. In Ukraine, the average pension was less than the poverty line from 1993 to 1996, the latest available data in the study by Milanovic (1998). In 1994-1995, it was 40 percent below the poverty line.

The World Bank's 1996 Ukraine poverty study (World Bank, 1996) reported a poverty incidence of 34 percent for households including one person age 65 or older and 49 percent for households with two or more elderly members. World Bank analysis based on the 1999 Household Budget Survey found that the poverty headcount for households comprising one pensioner was 24.1 percent, whereas 20.8 percent of households made up of two pensioners were poor. The older the pensioners, the greater the risk of poverty, a fact likely related to inability to work informally or in garden plots.

The Working Poor. Working households tend to wind up in poverty when household members are:

²⁴ An interesting methodological difference is that the labor force survey considers unemployed persons age 15-70, while the Ukrainian employment office records only unemployment among men age 16-59 and women age 16-54. These age brackets reflect pension age limits, 60 for men and 55 for women.

²⁵ A gender breakdown of official unemployment shows female-registered joblessness to be much higher than that of male—for example, 6.3 percent and 3.4 percent, respectively, in 2001. The ILO data, in contrast, are virtually identical when broken down by gender: 11 percent unemployed women in 2001, 11.2 percent men. This would seem to indicate that women have a higher incentive to register.

²⁶ In market economies, the unemployment rate of household heads tends to be markedly below the average unemployment rate, so it is likely that this rate is 8-9 percent in Ukraine. With a poverty incidence of 37 percent, compared with an average of 30 percent, this would imply that 10-11 percent of poor families had unemployed household heads.

- Employed but have too many dependents to support;
- Work in low-wage occupations;
- Subject to involuntary leave without pay or part-time work; and/or
- Paid irregularly as a result of wage arrears.

The working poor no doubt represented the great bulk of those who were pulled below the poverty line during the transition in Ukraine, as in almost all countries undergoing that process. Many of those whose relative wage position deteriorated during the transition were manual workers in declining industries and low-skilled clerical staff.

Milanovic (1998) concluded that for working families to stay ahead of poverty the average wage should be at minimum twice the per-capita poverty line. This would imply that the typical dual-income working couple (a couple with two children earning the average wage) would have labor income just equal to the poverty line. Not all such dual-income families would remain above the poverty line, especially since 60 percent of workers normally earn less than the average wage. But some would be pulled up by having one high earner or by receiving family allowances or in-kind income. Thus, an average wage-to-poverty-line ratio of 2 to 1 might keep a large majority of working families out of poverty. In Ukraine, this ratio declined from a pre-transition level of about 4 to below 2 from 1993 to 1996. In 1995, this average wage-to-poverty-line was at 1.8, which meant that only those earning 10 percent above the average wage were able to stay just out of poverty. As Milanovic's analysis shows, fewer than 20 percent of the employed fulfilled this condition. Some others were pulled up by other sources of income, but the overall poverty incidence was very high.

Place of Residence. Ukraine is divided into 24 oblasts, the cities of Kiev and Sevastopol, and the Autonomous Republic of Crimea. As of the December 2001 census, the total population was 48.4 million, of which 32.5 million were urban (67.15 percent) and 15.9 million were rural inhabitants (32.85 percent). Ukraine stands in contrast to some other former Soviet states and many developing countries in that poverty, by the standard definition, is not concentrated in rural areas. This can be partially explained by the fact that non-cash incomes from small plots constitute a significant portion of household consumption in Ukraine. The World Bank's safety nets study (2001) finds that poverty is closely related to size of household plots, and land holdings per household are significantly larger in rural areas (p. 19). Official statistics show that private farming makes up over 20 percent of aggregate household incomes for the population as a whole (Government of Ukraine, 2001), while the World Bank (2001) reports that in 1999 almost one quarter of total reported income came from household plots, an increase from one-tenth in 1990, and that almost two-thirds of Ukrainian households own subsidiary plots (p. 22). The World Bank's 1996 poverty survey explained the finding that rural poverty was lower than urban poverty as a result of easier access to land and food by rural families. However, the anthropological study carried out in tandem revealed important qualitative differences between urban and rural poverty; the rural poor were better off in terms of food but had less access to important services (including health, education, and transportation) and non-food consumer items.

Although rural or urban location has not been closely correlated with poverty, at least during the latter part of the 1990s there are stark regional differentials. Whereas Kiev had a 1999 poverty headcount of 11.15 percent, 42.58 percent of the population lived below the poverty line in Luhansk Oblast. The five poorest oblasts in 1999 were Luhansk, Mykolayiv (41.4 percent), Volyn (35.76 percent), Khmelnytsky (32.26 percent), and Zhytomyr (31.33 percent). These oblasts are spread throughout the country. Regional differences in poverty levels and social conditions are determined largely by the sectoral structures of regional economies and the extent of their industrial decline in the 1990s, which was spread unevenly. These figures notwithstanding, regional differences in Ukraine are not believed to be as wide as in other parts of the New Independent States (NIS).

The UNDP's regional human development index takes into account per-capita GDP and indices for education and life expectancy. It paints a slightly different picture and is lowest (worst) for Zakarpattia, Kirvohrad, Kherson, and Chernigiv oblasts and Sevastopol city (UNDP, 2001). It is interesting to note that Zakarpattia, with its very low human development index, actually ranks among the least poor according to the State Statistics Committee's household survey data, with a poor population of 16.96 percent in 1999. The more populous oblasts of Donestk, Dnipropetrovsk, and L'viv fall into the mid-range of poverty headcounts but have a higher absolute number of poor people.

Family Size. In Ukraine, as in most other countries, household size is significantly related to the level of consumption per capita and, therefore, to poverty. In the World Bank's 2001 multivariate analysis, household size affected the level of poverty more than any other factor analyzed, including education and type of employment of the household head as well as location of the household. The larger the household, the lower the consumption level, as a result of high child-dependency ratios. The total poverty headcount for 1999 was 26.7 percent. Poverty incidence for households with one adult and one child was 19.5 percent, but it was 45 percent and 64 percent for households with three and four children, respectively.

Pro-Poor Programs in Ukraine: Social Safety Nets

The government officially defined poverty and recognized it as a problem in August 2001.²⁷ A presidential decree outlined a poverty reduction strategy based primarily on job creation and increased wages. Despite this relatively late official acknowledgement, there has long been a multitude of programs in Ukraine that have a direct impact on the poor. These programs constitute a complex system of privileges, benefits, and social assistance based on laws, codes, decrees, and resolutions issued by the president, the parliament, the Cabinet of Ministers, ministries, and local authorities. Some programs are targeted, whereas others define eligibility by social categories. This system of social safety nets²⁸ has been described as "a hodge-podge of programs" in urgent need of systematic reforms (World Bank 2001, p. 21), including much better targeting.

²⁷ Poverty was defined as a relative phenomenon. The poor are those with expenditures less than 75 percent of the median (see Appendix B).

²⁸ Social safety nets are part of the larger category of social protection. Social protection also includes social insurance (such as old-age pensions and unemployment insurance), which is not discussed here.

Social programs directed toward specific categories of the population, including the poor, can be divided into five major categories whose beneficiaries are not mutually exclusive:

- Social privileges;
- Chernobyl benefits;
- Housing and utilities allowance;
- Family benefits; and
- Support for low-income families (that is, social assistance).

Although many have existed since the days of the Soviet Union, the programs currently in place are a mixture of pre-transition benefits and new schemes. Each program has many categories, and none appears to be very effective in reaching target populations.

Social Privileges. The system of social privileges illustrates the complexity of the overall system. Social privileges consist of cash and in-kind benefits for particular groups of the population, including veterans; civil servants; and other occupational groups, such as the military, the police, parliament deputies, judges, and customs officers. Social privileges include cash and in-kind benefits for housing and housing maintenance, public transportation, renovation of residences, acquisition of housing, subsidized credit, subsidized telephone service, free or subsidized drugs and medical services, free or subsidized automobiles, tax exemptions, and free legal services (World Bank, 2001, p. 23). For these forms of assistance, eligibility is not tied to family income. Where privileges are occupationally targeted, they act more or less as employee benefits.

In 1999, 42 percent of Ukrainian households received some type of social privilege, most often housing. For example, families of war veterans are entitled to a 50 percent discount on housing and municipal services. About 30 million people have been entitled to subsidized transportation.

Not only are these benefits not targeted to the poor, but there is also leakage to non-members of a particular group. When the law on war veterans was being developed, their number was estimated at 1.7 million. Upon ratification of the law, the number of people claiming that status rose to 5.3 million, or more than 10 percent of the population (Goralska, 2000, p. 249).

Chernobyl Benefits. The Chernobyl program was set up specifically to help the people affected by the 1986 nuclear catastrophe's damage to 12 oblasts and 4.6 million hectares of land. A total of 2.1 million people are eligible for benefits. For the most part, Chernobyl Fund resources have been spent on compensation payments and resettlement costs.

Housing and Utilities Allowances. The Housing and Municipal Service Allowance Program was launched in 1995 and is operated through a network of 761 housing subsidy offices. Housing and utilities allowances are mainly intended to shield families from the impact of rapidly increasing fuel costs. Initially, assistance was provided to families paying more than 15 percent of their income on utilities, rent, and maintenance. In 1999, this share was raised to 20

percent for working families (remaining at 15 percent for families without a wage earner). Subsidies are awarded to applicants for six months at a time.

Almost one quarter of households received these housing allowances in 1999 (average monthly amount was UAH 24.40), and 3 percent of household received fuel and liquefied gas subsidies (average monthly amount was UAH 10.30). In addition, 16 percent of households received privileged reductions in housing and utilities payments. Altogether, therefore, 43 percent of households were subsidized.

Family Benefits. The Law on State Assistance to Families with Children identifies 11 types of family allowances. Some are categorical, whereas others are means tested. There are two main goals: first, to reduce child poverty and, second, to encourage population growth. All families with children up to age three are entitled to a benefit. Single mothers with children up to age 16 are also eligible. Child benefits are provided without a means test to foster-care families, military servicemen, and families with handicapped children. A lump-sum birth grant is available to everyone. Eligibility of other programs is based on a means test with limits on monthly per-capita family income of UAH 41 in 1999. The most prevalent benefit is an allowance for children under 16 or students under 18. Awarded on the basis of an income test, it covers 260,000 recipients. Interestingly, less than one-fifth of all families with children receive family allowances. Although this is related to means testing, it also reflects non-payment as well as self-selection by families for whom the benefits are not worthwhile.

Assistance for Low-Income Families. This category is also known as targeted social assistance. Under its strict criteria for low-income families, only 4.5 percent of Ukrainian families were eligible in 1999. Categories of eligibility are:

- Pensioners with dependent children up to age 16 (age 18 for students);
- Non-working parents with dependent children;
- Mothers of three or more dependent children; and
- Individuals with disabled or elderly dependents (age 80 and over).

Monthly family income had to be less than UAH 41 per capita per month in 1999 (the same as the family benefits program). Regulations list 17 types of income that should be counted, from wages to in-kind income.

As of January 1, 2000, monthly allowances were granted to only 7,165 families at UAH 106.80 per family. However, less than one-half of the eligible households actually received their allowance. The rest suffered from the arrears in the payment process

Other means-tested social assistance benefits include cash benefits for low-income persons unable to work, state cash benefits for some pensioners, supplementary monthly benefits for living, and additional one-time social assistance to the most needy households.

Social Safety Net Reform

Although to a certain extent pro-poor, the social safety net system in Ukraine is in need of reform. A major institutional reform is required to streamline the system, in close collaboration with other reforms in social protection (such as pension reform and unemployment insurance). More pro-poor targeting can be conducted on the basis of existing budgets, resulting in better support for the poorest Ukrainians. For a detailed case study of targeting programs, see Box C.

Looking back at the 1990s, the main institution that did serve to keep millions of families either out of poverty or out of worse poverty than they suffered was the household agricultural plot. This institution was pivotal in keeping up the incomes of rural families, especially, and albeit to a lesser extent, many urban families as well. The foresight of the planners who arranged for the expansion of such plots, both in numbers and in size, deserves the prize for the most pro-poor policy step of the 1990s in Ukraine.

Box C: The Social Safety Net, A Targeting Case Study: Dnipropetrovsk Oblast

A detailed study of benefits and their pro-poor impact was conducted by Whitefield (2002) in 1999 in Dnipropetrovsk Oblast. The sample for the survey was taken from two sources: 480 households drawn randomly from a listing of addresses and 320 households from the register of households that received a housing subsidy. A poverty line was constructed from (1) the Ministry of Labor and Social Protection's minimum food basket priced at local oblast prices (UAH 85.47 per month) and (2) a non-food component, estimated by averaging the total non-food expenditure of the 150 sampled households whose total food consumption was closest to the minimum basket (UAH 36.39). This resulted in a poverty line for Dnipropetrovsk of UAH 122.16, and 35 percent of the respondents were found to be poor.

The analysis set out to establish how many households that were not poor would have been poor if they had not received any benefits. If housing benefits were withdrawn, the incidence of poverty would increase by almost 5 percent among those currently in receipt of the benefit and by almost 2 percent across the whole sample. If all benefits were withdrawn, the increase in total poverty levels across the whole sample would be nearly 6 percent.

That poor households were marginally more likely to be in receipt of benefits (57 percent) than non-poor households (49 percent) must be weighed against the fact that a large number of the poor do not receive benefits (43 percent) whereas a majority of non-poor households do (51 percent). The analysis further constructed three indices of the effectiveness of the social safety nets system for poverty reduction to conclude that the housing benefit system was to a great extent both unjust and inefficient. These indices were:

1. The ratio of poor households in receipt of housing benefits to the total number of poor: 57 percent;
2. The ratio of non-poor households that receive housing benefits to the total number of recipients (49 percent); and
3. The ratio of those properly in receipt of benefits (not in receipt because not poor and in receipt because poor) to the total number of people in the sample: 53 percent.

Great potential exists for poverty reduction by improved and increased targeting, holding budgetary constraints constant. Whitefield models the effect of distributing benefits savings from non-poor households (defined as those who would not become poor by removal of benefits) to poor households and finds that the mean increase in benefits to poor households would be UAH 68.89, resulting in a poverty headcount of 21.3 percent, after a dramatic reduction of 17 percentage points.

AGRICULTURE UNDER TRANSITION

Structure of Agriculture under Communist Rule

Ukraine and the other countries of the Soviet bloc share the common institutional heritage that most land, regardless of its ownership, was cultivated collectively in large-scale state and collective farms. Product markets and input supply channels were largely controlled by state organizations within an administrative command framework. Production targets for these units were set centrally. Budget constraints to penalize underperformance virtually did not exist (Lerman et al., 2002, pp. 23-24). The commercial production from these units was supplemented by subsistence-oriented individual agriculture based on rural household plots of less than 1 hectare. In the Soviet bloc as a whole, the millions of small household plots, averaging 0.5 hectare, controlled 5 percent of agricultural land.

Large-farm socialist agriculture has been widely judged by Western economists to be economically inefficient, an outcome that is seen to be a natural result of the command economy that insulated farms from market signals, imposed central targets, and failed to impose budget constraints. Two other factors, however, were the collective organization of production and the exceptionally large sizes of the farms that, with thousands of hectares and hundreds of member-workers, were several times larger in area than those of land-rich countries like the United States and Canada and enormously larger in number of workers. Such large farms are a rarity in market economies, whether developed or developing, and tend to survive in competitive environments only under special circumstances.

As with large farms in developing-market economies, these units achieved relatively high labor productivity through relatively high land/labor and capital/labor ratios. Technology was also quite energy-intensive, reflecting the very low cost of that resource. Thus, unlike in most market-oriented developing countries, labor productivity in the Soviet bloc countries, including Ukraine, was at about the same level in agriculture as in other sectors; as of the 1980s, the share of the labor force and the share of output from agriculture were 20 percent (Lerman et al., 2002, p. 51). Agricultural output grew at 23 percent over 1980-1989 (an annual rate of 2.3 percent) while GDP was rising at 30 percent (annual rate of 3 percent). Labor productivity jumped by a striking 46.9 percent over that period, or 4.4 percent per year as the level of agricultural labor shrank (p. 52). But an indication of the overall inefficiency of these large units was the much higher land productivity of the small household plots. In the Soviet Union, where output data for these plots was collected over long periods of time, this sector produced 20 percent of the output from 2 percent of the land, using part-time labor.

The Family Farm as an Alternative, Pro-Poor Agrarian Structure?

Pro-poor growth, in most of its dimensions, involves activities that combine a good level of economic efficiency with a progressive (pro-poor) distribution of the fruits of that efficiency and the associated growth. The two major contexts in which that combination is most widely

felt to be achievable are small-scale (family) agriculture and dynamic small and medium-sized non-agricultural enterprises (SMEs).

The family farm has long been viewed as an effective way to organize agricultural production, both from an efficiency (output) point of view and in terms of its income distribution implications. Evidence on the relative efficiency of small farms and plots from around the world confirms that reduced size is seldom an obstacle to efficiency when the appropriate supporting system is in place. The high productivity of household plots in Ukraine and other former Soviet bloc countries suggests that some of the same general principles that apply elsewhere are alive and well in these countries. Looking to the family farm as the building block of post-Soviet agriculture is thus a natural inclination and one that has guided the thinking of many reformers. The payoff to these efforts has been relatively small, however, a reflection of the fact that it would be neither an easy task nor a quick one to effect this transition at the best of times, let alone in a conflictual political situation where many forces conspire against this objective. Worse, there is the serious risk that, because of missteps and problems along the way, the final structure may be closer to the *latifundia-minifundia* system made famous by the inegalitarian countries of Latin America than to the efficient, dynamic, and eminently pro-poor family farm system of a country such as Taiwan.

Under most circumstances, once there, the family farm provides a superior form of organization for agriculture, both from an output and a distributional point of view. But shifting to that structure from a system of state or collective large farms involves difficult challenges, just as does agrarian reform in a system of large private farms. In either case, the whole support system (transportation system, distribution system, provision of technical assistance, and so on) has normally been constructed for large units. Beliefs tend to support whatever system currently exists.²⁹

Small farmers operate best when they do not have to confront monopolies and oligopolies as they purchase their inputs and sell their products. Another challenge in a country like Ukraine is thus to help them avoid the losses associated with unequal market power against them. They operate best when private associations (cooperatives) allow them to act collectively in those markets in which they would otherwise be at such disadvantages.

In short, a system made up of small units requires well-functioning markets and some ability to cooperate. This involves good regulations on market functioning; capacity to buy, sell, and lease land; capacity to borrow; and so on. This structure of institutions and actors that makes small agriculture function well, where it does, constitutes a mutually supportive system of elements. When few of those elements are present, the small unit system, to extent it exists, functions well short of its potential.

The starting point for the transition in Ukraine was the system of collective and state farms. Large farms in centrally planned economic systems are a special case of the developing-country large farm, a case that tends to suffer from excessive capital intensity (relative to the

²⁹ Russian analysts, not surprisingly, believed the large corporate farms were the most efficient (Osborne and Trueblood, 2002, p. 18). Presumably, Ukrainian ones did too. But large corporate farms in both Russia and Ukraine have performed poorly since the reforms began in 1992.

land input) and from weak management, at least as judged by the criteria of market economies. A major contrast with most large farms in market-oriented developing countries is the extensive use of labor, through a process of hoarding of what would otherwise be surplus labor.

In a country like Ukraine, transition from such a large farm system to one composed mainly of family farms confronts several major challenges. Failure can take various forms; the efficiency and output gains may not occur, the process may turn out not to be pro-poor even if efficiency improves, or outcomes may fall short on both fronts. There are political, ideological, infrastructural, and other constraints on making this transition quickly and successfully. It requires that:

- The reform gets off the ground at all;
- Those in a position to divert the land toward themselves (instead of to the smaller farmers who would receive it under a true family farm regime) are blocked from doing so;
- The newly created farm owners have enough entrepreneurial skills, in spite of not having performed such functions in their previous employment, such that the farms are run well;
- Markets work well enough to provide the inputs and take the outputs of these farmers and reasonable prices and in a predictable fashion; and
- Public sector support systems, including infrastructure and credit, are developed quickly enough to help these farms raise productivity and stabilize their operations.

There have been serious problems on most of these fronts, leaving much uncertainty about what the final outcomes will be. Under the worst-imaginable scenarios, the reform might turn out to be strongly anti-poor. In that pessimistic scenario, there are short-run output and income losses as a result of confusion and inefficiency around the process of transition;³⁰ the transfer of land to families is subverted in favor of their transfer to people with power—for example, former farm managers; the labor force is rapidly downsized as the new *latifundia* strive to cut costs, with the result that the former workers have neither land nor jobs;³¹ and, in spite of evicting the former workers, the new farms are not run efficiently and thereby do not contribute significantly to economic growth in the country. If the timing of such a downsizing of the agricultural labor force were to coincide with weak performance in the rest of the economy, poverty would be accentuated. An intermediate output is that in which there are efficiency gains but at the expense of labor downsizing. If the path eventually does lead to a family farm system but the new system gets up to speed only say 25 years after the onset of the

³⁰ Output is likely to fall because of the changes, incentive problems, and lack of coordination when markets are still too underdeveloped to be the source of that coordination, which was previously provided by the planning system.

³¹ High employment levels are likely to be retained only if there is collective ownership or other constraints against firing or if the land is transferred to small private farmers. These individuals normally operate their land in a more labor-intensive way because of the high incentive to keep themselves productively employed. In the former case, employment may be kept up but income may not.

reform, there may be relatively few people left in the sector, so that its success at that time will be of limited relevance, either to overall economic growth or to the progress of the poor.

Reform steps have been undertaken to change the agrarian structure in Ukraine since 1990, but both the laws and their implementation have reflected the ongoing battle between Western advisors who push for land reform and local policy makers who resist it (Osborne and Trueblood, 2002). Ukraine had a political-administrative combination that was far removed from one that might have been expected to guide policy makers smoothly through the difficult choices on timing and direction. The old Communist group retained considerable voting power, and the views of the politicians and administrators from the old guard were ill disposed to the market orientation pushed upon them. Rather than choosing wisely toward a different system from the one they knew, they would be expected to oppose and try to sabotage or slow the change, or to misunderstand how the new system might work and thus be incapable of wise choices even if they accepted the need for change. Policy makers in NIS “essentially perceive market agriculture as based on successors of former collective and state farms, which are to be subjected to a ‘horizontal’ transformation toward improved productivity but otherwise remain largely unchanged in scale and scope” (Lerman et al., 2002, p. 160).

This contrasts with the politicians in Central and Eastern Europe who appear to have recognized the need for radical changes in the farm-enterprise sector. Meanwhile, some reform advisers (and some authors commenting on the recent history of Ukrainian agriculture) appear to have been simplistic in their belief that moving resolutely to a full market system regardless of the starting point can always be counted on to bring benefits; they might not be the shrewdest of advisors in a world of complicated dynamics and a frequently obstructionist political economy. In short, the forces standing in the way of the development of a small or family farm system have been many, including the obvious interest of anyone in a position to get or keep control of a large chunk of land. In addition, the risks involved in plunging into a family farm business without the needed supporting institutions were daunting, so many collective members have opted not to take that plunge.

Like most post-Soviet transition economies, Ukraine now allows private ownership of potentially all farmland, but this is not synonymous with the right of land transfer among users. Buying and selling of land are restricted in practice, and land transactions are mainly limited to leasing. Land sales are virtually nonexistent. The land reform law of 1991 would not permit land transactions until 2005 or unrestricted ones until 2010.^{32,33} This might not be a great impediment because experience from around the world indicates that security and transferability of tenure appear to be more important determinants of productivity and efficiency gains than legal property rights. Security and transferability are key in enabling farmers to adjust the size of holdings and in ensuring that the market is able to allocate resources to the most efficient producers.

³² A temporary moratorium on sale of land in transition countries may sometimes be necessary for political or social considerations to avoid excessive concentration of land in the hands of speculators and foreign owners, a concern to policymakers. In Kazakhstan, for example, managers of farm enterprises took advantage of the total lack of management experience among the rural population to entice the new shareholders to sell their land shares (Lerman et al., 2002, p. 153).

³³ We understand that the 1991 law has been superseded by a new one passed in 2001, which allows land sales, except to foreigners.

The increase in the share of land controlled by small individual farmers (as opposed to tiny household plots) has been slow for four reasons. First, the initial reform step taken was to distribute ownership shares to the former collective or state farm workers. The legislation and the international donors gave much emphasis to this process and little to the distribution of physical plots to individual farmers. Second, as a result part of the lack of planning for the division of physical plots, the degree of risk aversion, and the unpropitious setting they confront, recipients of land shares often refuse to exit large collectives and begin their own independent farms (Lerman and Csaki, 1997). A similar refusal sometimes occurs when more land is offered to private plot owners, and they are unwilling or unable to take it. Contributing to the difficulties of new small farmers has been a strong psychological resistance to the formation of service cooperatives (Lerman et al., 2002, p. 163), which often make an important contribution to the competitiveness of small farmers in market economies.

Despite the lack of economies of scale in primary agricultural production, there are economies related to market imperfections in input supplies, markets, and credit. Individual farms in market economies overcome these constraints through the creation of service cooperatives. Third, farm managers and others have a natural interest in retaining control over land rather than ceding it to new small operators. Most leasing thus far is to individual shareholders, to farm enterprises, or to other individuals; some leaseholders are large, with upwards of a couple of thousand hectares (Lerman and Csaki, 2001, p. 21). Finally, there remains a symbiotic relationship between the management of large collective and corporate farms and the regional authorities. The regional political system still uses its power of access to resources and authority mechanisms to impose its will on this agricultural sector. It is easier for the authorities to control and tax large collective and corporate farms than thousands of small operators. This interplay acts to preserve the existing structure. This phenomenon has largely disappeared in those countries that became highly democratized during the transition (Lerman et al., 2002, p. 164). At the national level, only the democratic parties support the family farm vision; the other two political groups are opposed, the Communists for ideological reasons and through belief in the efficiency of large farm units, and the ideologically uncommitted parties of the power linked to corrupted bureaucrats for whom mass privatization would mean the end of their control over agricultural resources and the corresponding profit flows. There is no strong popular pressure for mass privatization because most farmers prefer the collectives that provide employment, social security and additional benefits legally or illegally from collective farms (Nijnik, 2001, p. 7).

The upshot is that, although private ownership is technically widespread, the land in individual use in 1997 in Ukraine was only 17 percent, up from 7 percent in 1990; the production share was 53 percent, up from 27 percent (Lerman et al., 2002, p. 90). These figures are not far from the average for the NIS countries (Table 12). In contrast in the Central and East European (CEE) countries, 66 percent of land was individually cultivated, up from 21 percent in 1990. Productivity of agricultural land has risen by over 30 percent between 1992 and 1997 in CEE countries while falling by over 20 percent in those of the NIS (p. 140).

Table 12: Share of Land in Individual Use in CEE and NIS (percent of agricultural land) and Share of Individual Production in NIS (percent of gross agricultural product), 1990 and 1997

CEE Countries	Individual Land		NIS Countries	Individual Land		Individual Production	
	1990	1997		1990	1997	1990	1997
Albania	4	100	Armenia	4	33	35	98
Slovenia	92	96	Georgia	7	24	48	76
Poland	77	82	Ukraine	7	17	27	53
Romania	12	67	Moldova	9	27	18	51
Hungary	6	54	Belarus	7	12	25	45
Bulgaria	13	52	Russia	2	11	24	55
Czech Republic	5	38	Kyrgyzstan	1	23	34	59
Slovakia	5	11	Kazakhstan	0.2	20	28	38
Latvia	5	95	Azerbaijan	3	9	35	63
Lithuania	9	67	Tajikistan	2	7	23	39
Estonia	6	63	Uzbekistan	2	4	28	52
			Turkmenistan	0.2	0.3	16	30
Average CEE	21	66	Average NIS	4	16	28	55

Source: Lerman et al., 2002, p. 90.

Toward what sort of agrarian structure Ukraine is heading remains unclear. Van Atta (1998) contends that the household plot is an integral part of the overall agrarian system, which has changed little since the 1930s. The plots can achieve their high productivity only with resources provided, willingly or not, by large farms, and the plots complement the large forms in many other ways. This pattern, parenthetically, has its parallel in many *latifundia* systems of Latin America. The large farms handle the extensive items and the plots the labor-intensive ones. With the absence of proper equipment for the production of sugar beets, the large farms have during the 1990s returned to subcontracting with individual householders because the alternative technology is labor intensive. Although the renewed prominence of the household plot reflects a temporary breakdown of the old system, it may once again help save that system. It has constituted the only reliable social safety net; Ukrainian rural pensioners could not survive without their household plots and the support those receive from the large farms (Buckley and Hickenbottom, 1995, cited by Van Atta, 1998, p. 614). “Ukrainian politicians who bitterly oppose privatization and sale of large farms’ lands have approved the privatization and sale of household plots in order to relieve the pressure for more fundamental, sweeping changes.” (p. 615).

Meanwhile, in some productive areas foreign and domestic companies have begun to rent land from the former farms to produce staple crops, particularly grain and oilseeds, for export. They support far less labor than the former collective farms. Continued evolution along this path would resemble the Soviet-era division of labor between large firms and household plots, “but it could even have more devastating consequences for the future economic development of Ukraine if and as the country becomes more open to international markets.” (Van Atta, 1998, p. 615). Effective resource allocation and, as part of that, the maximization of the benefits from

international trade require reliance on market signals about what is scarce and hence profitable to produce and which inputs are scarce and hence to be husbanded carefully. This does not, of course, mean that it is optimal to let domestic prices follow all of the gyrations of international prices, but it does call for avoiding large and continuing discrepancies. How this objective can best be reconciled with agricultural growth that is pro-poor may be a difficult challenge.

Thus, although the shares of land under individual use and the output from that land have been rising, major benefits on the output side do not seem to have followed quickly, and there is uncertainty as to whether this is essentially no more than a perhaps temporary readjustment in a stable long-term symbiosis between the very large non-individual farm and the household plot of its workers. Analysis is needed to help clarify whether the burst of output growth over the last three years is partly a result of gradual individualization or the growth of modern corporate farming, or whether it stems from better incentive policies or simply good weather conditions. According to Lerman et al. (2002, p. 161) and Van Atta (1998), the individual farming sector is growing mainly through the increase in household plots assigned to collective farm employees, rather than the creation of separate farms. If the expansion of large but well-managed farms is becoming quantitatively significant, the path could, as Van Atta warns, involve much labor displacement.

The Sharp Decline in Agricultural Production, Reforms, and the Evolution of Agrarian Structure

Until the early 1990s, Ukraine was a large exporter of sugar, oil, butter, salt, and grain; the country was second in world sugar production and produced 20 percent of world grain output. The abolition of the administrative relationship between suppliers and consumers that accompanied the demise of the Soviet Union combined with loss of traditional markets and appropriate support for production led to a dramatic fall in production (Nijnik, 2001, p. 2). Production of sugar fell from 6.8 million tons in the early 1990s to 1.2 million by 1999. Outmoded agricultural technology and a high share of land under cultivation (54.8 percent) have caused soil erosion on 35.2 percent of the arable land, and the Chernobyl accident affected 8.4 million hectares with radioactive contamination.

As with other sectors, the presumption is that the official data overstate the true decline of agricultural output, even though in principle they capture the output of household plots, which has risen substantially. In this case, a partial crosscheck is provided by household survey data on per-capita food consumption. In 1990-1999, when the official value of agricultural output fell to under half of its 1990 level, the decline in per-capita consumption indicated by the household surveys was 28 percent (based on figures presented by Van Atta [1998, p. 610] for a selection of food items), suggesting an overall decline of 30 percent. Part of this difference would be accounted for by changing export and import patterns. Still, it appears that the official data give a substantially downward-biased impression of what happened over the decade.

As with overall GDP, the 1990s experience was the reversal of a previous decent record. Whereas wheat yields in Russia and Ukraine had gradually gained on and caught up with the

average of four major producers over 1962-1989, a big gap has arisen since then (Osborne and Trueblood, 2002, p. 11). Ukraine agricultural enterprises showed falling technical efficiency over 1993-1996 but then recovered slightly (whereas those of Russia continued to fall).

Osborne and Trueblood (2002, p. 8) see the decline in production since the reforms began as an inevitable result of the process of aligning domestic input and output prices to world levels. But some of it is, in their judgment and that of many others, the result of incomplete agriculture-specific and economy-wide institutional reforms. Given the political battle over the future of Ukrainian agriculture, it is not surprising to find a serious lack of coordination and strategic integration of policy measures and a high degree of inertia in operating procedures. The Ministry of Agriculture is still organized as a tool of an administered economy. This can lead to frustration at a high level, and ministers and even the government as a whole can be relatively powerless; the stake of the unreformed administration in the status quo can lead to splits within the executive branch, as illustrated by refusal to implement policy decisions or the sabotage of their implementation (p. 9). At a more detailed level, there has been no significant tradition of policy analysis. Some reforms, such as that announced by Kuchma in 1994, have been initially successful but have then stalled at a later stage because of both political and technical factors. The 1999 reform included some positive elements, which would have facilitated break-up of some large farms, but it too met resistance. Erratic adoption of bad policies has been a product of the combination of different views on policy with lack of clear authority by any institutional actor. In 1995 and 1996, the government appeared committed to refraining from intervening in foreign trade of agricultural items, but by mid-1996 parliament had imposed duties on exports of live animals and hides and in 1997 established quotas on imports of certain categories of live animals and fresh refrigerated frozen meat. Oilseed production has good technical potential in Ukraine, but government imposition of an export tax risked eliminating the needed incentives. Sugar, in contrast, is now seriously non-competitive, and the social fallout will be large if and when major government support is removed, but the needed coherent response to this challenge has been lacking.

The development of the support systems has been slow. Farms in market economies are extensive users of credit to meet operating costs. In Ukraine, farms have had no working capital and no feasible assets to pledge, given the slow development of the land market and the lack of other productive assets. Technical assistance is lacking. Input and output markets are underdeveloped. There have, however, been some recent improvements. The government has ordered banks to provide subsidized loans for planting, with the difference vis-à-vis regular interest rates made up by a government subsidy to the banks (Thirsk, 2003b). The growth of private services should also be helping some farmers. Agricultural producers, like those in small and medium enterprises (see below) are now subject to a fixed presumptive agricultural tax which simplifies their tax situation.

Csaki and Lerman (2001) report that the 1999 reform, which abolished collective ownership in favor of limited liability associations, cooperatives, and private family farms, has brought some changes but not a major restructuring. As a result, the economic results are also weak. Usually, the units stay large, with few “determined or creative efforts to reorganize the farm enterprises into smaller functionally independent units” (p. 17). Even in international donor projects, run by experienced market-oriented managers, restructuring is mainly on a one-to-one scale. On

the positive side, there has been an improvement in labor relations and worker behavior in the reorganized farms, according to response from managers. The changes have not led to significant labor adjustments, so labor/land ratios are about the same and no major breakthroughs have been recorded on productivity or efficiency.

Based on the experience of the other transitional economies, it is hard to expect significant recovery in agriculture, despite the restructuring efforts and other policy improvements, as long as economic decline continues and institutional reform remains sluggish. Whatever the causation in each direction, it is the case that agriculture has grown rapidly during the boom beginning in 2000.

Agriculture, Income Distribution, and Poverty: The Record in Ukraine

During the 1980s, according to Kakwani (1995, p. 22), agricultural wages rose relative to those in most other sectors, with positive impacts both on income distribution and on poverty. In the 1990s, the opposite trend occurred; recorded agricultural wages fell relative to those in other sectors. Taken by itself, one may presume that this contributed to increased inequality and rising poverty. The same holds with respect to the declining real value of transfers to rural pensioners. These negative trends have been at least partially offset, in terms of their impact on poverty, and probably more than offset in their impact on inequality, by the increasing positive contribution of household plots during this lean decade.

Household plots achieve strikingly high productivity not just in Communist countries but more generally as a result of a combination of high-value products like fruits, vegetables, poultry and eggs, and other basic food necessities). This role became increasingly important in Ukraine during the downward spiral. Productivity of the rural plots (in effect private commercial farms owned by the collective but farmed by individuals) may have risen further through greater-than-normal siphoning of inputs from the large farm enterprises on which nearly all agricultural workers still had their base. Van Atta (1998, p. 607) reports that by 1995 these plots accounted for 57 percent of the income of all rural households, but only 4 percent that of urban households, for whom their much smaller plots were generally oriented to self-subsistence and the provision of foodstuffs to tide families through the winter. Data on the per-capita consumption of selected food items by rural and urban families and by the highest- and lowest-income categories in each indicate that at both ends of the income range the rural households were better fed. Van Atta (1998, p. 611) does note that a good deal of the reported consumption could in fact be reused in production or sold, but believes this would not reverse the conclusion that food consumption was higher in the rural families.³⁴

Nearly all rural households had plots (99 percent of families whose budgets were tabulated and studied in 1997) as compared with just 28.5 percent for urban ones, and the average size of the former was greater, 0.53 hectare to 0.13 hectare. The number of urban plot holders did increase

³⁴ According to the World Bank's farm survey of late 1998, household plot production continued to account for 45 percent of rural family income (16 percent in the form of sales from the plot). The other main components were 33 percent in the form of salary in kind, 9 percent salary in cash, and 15 percent from other business (cited by Bostyn, 2001, pp. 21-22).

much faster over 1990-1997 than for rural ones, a trend traceable to a policy decision by the designers of the land reform begun in the Soviet Union that a small garden plot be made available to any urban resident who wanted one. This was construed as a safety net against the expected disruption of food production and supply from any change in land tenure patterns (Van Atta, 1998, p. 612). To the same end, the government also removed restrictions on the size of collective farmers' household plots. As of January 1998, 20 million Ukrainian families had plots of land to use for food production.

The increased importance of the household plot reflected the decline of the economy and was in a sense a return to a subsistence mode. With almost no cash in circulation and with a far less than fully employed population, the value of the produce was much greater than before, and its production, at least in terms of labor, was probably for the most part costless.

Policy Issues

Given the apparently traumatic decline in average incomes during the 1990s and the increased concentration of wealth and income at the top of the distribution (whether the bottom deciles lost relative to the middle is less clear because household plots seem to have played a significant role in avoiding that outcome), the task for pro-poor growth during the years to come will be a major one.

Lerman et al., (2002, pp. 165-166) provide a wise comment on policy for the current setting, recommending that:

in countries where fast transition towards individualization is not feasible for social and political reasons (e.g., Russia, Ukraine, Belarus, Central Asia) the strategy should focus on creating the conditions which provide inducement to the break-up of the large corporate farms into farms of most efficient size given local circumstances—farms that typically will be much smaller and certainly more manageable and will operate under hard budget constraints. Various subsidization avenues allowing 'restructured' farms to avoid being exposed to market discipline need to be curtailed.... This also implies that central governments need to induce local authorities to cease viewing farms as a tool for social policy (e.g., a source for producing cheap goods).

If the social policy under discussion is strongly employment creating, the proposed policy may create a dilemma, as discussed above.

The authors note that dismantling is the most direct route to individualization and has been followed in some countries. But distribution of paper shares can work if followed by a second stage in which land and assets are distributed to individuals in kind, as occurred in Moldavia. An interesting system might be production handled by individuals while services are provided by corporations or cooperatives, as in the Israeli *moshave* or in a recent development in Russia, where former farm enterprises act as a service shell for household plots that are responsible for

all production. They may evolve into genuine service cooperatives if subsidized input deliveries are ended and hard budgets introduced.

SMALL AND MEDIUM-SIZED ENTERPRISES IN UKRAINE'S ECONOMY

The Potential Role of SMEs: Evidence from Other Countries

The important contribution that one hopes the non-agricultural SME sector will play in transition economies such as Ukraine is similar to that sought in many other developing countries. The benefits from a rapid growth of a healthy SME sector are, however, likely to be greater in such transition economies than in most market-oriented developing countries; at the same time, the impediments to this healthy growth are more numerous and more severe.

The SME sector in any market economy makes a variety of contributions to the performance of an economy. Currently, the sector's contribution to the amount of adequately remunerative employment is the most prized of the benefits from the sector because economic growth has often not been accompanied by as much employment generation as hoped. That need is especially great in transition economies where unemployment and poverty have risen rapidly and where for the sake of economic efficiency it is important to downsize both government and large state enterprises. At the same time, transition countries are shifting away from the social safety system they previously had, based on guaranteed employment and low-cost rations of some basic needs. But these countries have not yet been able to put in place the combination of components of the safety net found in developed industrial societies, nor do they have recent strong legacies of the two main components of safety nets in developing-market economies—the extended family assistance network and the possibility of working in the informal sector.

Healthy development of the SME sector would thus be a godsend in transition economies. But the challenge is greater than in most developing countries for several reasons:

- The sector does not have a tradition of anything like the importance it does in most market economies;
- The supply of entrepreneurial talent for this sort of firms is very low, perhaps even more so than for large enterprises (debatable); and
- The SME sector plays its role best when market imperfections are not too widespread and where those imperfections do not weigh too heavily in favor of large firms. But in the transition period that Ukraine is now passing through, input and output markets are full of imperfections, implying high risks for SMEs, high transactions costs, and marked disadvantages relative to the larger firms favored by their political connections and their history of being at the center of the economic network.

Although it is thus unreasonable to expect a quick explosion of healthy SMEs in this sort of sector, its longer-run role is nonetheless very important so policy support should be given.

Recent literature emphasizes the important contribution that SMEs can make to an economy's strong performance, whether in the United States (Audretsch, 1998); Japan (Urata and Kawai, 1998); developing East Asia (Berry and Mazumdar, 1991); or Africa, Latin America, or the transition economies of Central Europe. For the most part, the increasingly positive reassessment of that role stems from a better understanding of the static economics of SMEs, a better recognition of the scope of SMEs in economies and a more careful thinking through of the role of firm dynamics in economic structure and performance. Perhaps most important has been the empirical evidence that some of the world's best-performing economies, notably Taiwan and Hong Kong, are very heavily based on small enterprises. A few experiences from countries elsewhere confirm that the SME sector can be a major source of dynamism, as in the case of Colombian manufacturing from the late 1960s to the early 1980s (Cortes et al., 1987).

Most of the especially successful economies where SMEs have played a large role have also been outward-oriented East Asian countries. These countries have been successful at hooking the SMEs into the export process, through some combination of direct exporting by smaller firms (often through relatively small intermediary agents, as in the case of Taiwan) or through subcontracting by SMEs with bigger firms, as in Japan over a long period and Korea with increasing intensity since the mid-1970s.

This empirical evidence is consistent with the suggestion that an economy's performance will be better in terms both of output and income distribution and of employment generation if it focuses a sizable share of its resources on technologies of middle-level capital intensity, rather than allocating a high share of the capital to a few workers employing modern technologies and almost none to the rest of the labor force. Thus, the more basic feature of the SME sector is not firm size per se but the level of firms' technology and productivity. A country endowed with a medium-level of resources per person needs to have a large amount of those resources utilized with medium level technologies unless it wants a very unequal distribution of labor across the available capital. In these cases, a few workers are able to achieve very high productivity because they work with a lot of capital and the rest able to attain no more than a very low productivity because they are starved of capital. Because, with a few exceptions, size of enterprise is closely correlated with level of technology, such a country should normally have a lot of SMEs because if it allocates too much capital to large enterprises there will be much labor left over with little capital to complement it, and this mass of resources will be mainly in low-productivity microenterprises. In some developing countries, large firms seem to operate without excessively modern technology, but this is unusual.

Japan remains the prototype of the economy in which the SME sector plays a major role, principally via subcontracting with large firms, which tend to engage in international trade. Taiwan is the prototype in which the SME sector plays a pivotal role by itself, without the high level of dependence on large firms that characterizes the Japanese model. Many students of Taiwan's experience believe that the country's outstanding success in achieving dramatically fast growth and perhaps the lowest level of inequality of any developing market economy is attributable to this dominant SME role (Fei, Kwo, and Ranis, 1979). Colombia and Costa Rica are examples from Latin America where the sector has, at least over a period of time, shown unusual dynamism. Most interesting of all perhaps is the experience of Korea since the mid-

1970s. Until that time, its industrial structure was more similar to that of countries like Brazil, Mexico, Indonesia, and Ukraine than to that of Taiwan; it was dominated by large firms that did relatively little subcontracting and had an underdeveloped SME sector. Since that time, however, Korea's SME output and employment growth have been fast, such that its share of those two variables in the manufacturing sector has surpassed that of the large firms (Cho, 1995). At the same time, the level of inequality in the country has diminished. Most of the SME growth has been the result of a rapid increase in the density of subcontracting—that is, to a move toward the Japanese model of industrial structure.

The SME Sector in Ukraine

The challenge of SME development in Ukraine is in some respects parallel to that of small agriculture. These two sectors, if they can be developed and energized, are likely to be the key to an effective allocation of resources and good technology choice. But outside agriculture as within it, there are the challenges of moving away from a command economy built on large enterprises by encouraging new entrepreneurs and developing the markets and other elements of the support system that make the SME sector flourish. Quick success is not to be expected, and impediments are guaranteed. The key questions are, Is progress occurring at a satisfactory rate? And, if so, what accounts for it and if not what are the obstacles?

Given Ukraine's history as a part of the Soviet Union, in comparison with developing economies at similar levels of GDP per capita, Ukraine's non-agricultural sector remains tilted toward large enterprises. The industrial sector was traditionally also very high technology and extraordinarily intensive in technical and professional competence (Hansen, 2003). Much of this highly productive sector (if somewhat overstaffed due to Soviet-era job creation policies) produced military-industrial complex products whose demand disappeared with the collapse of the Soviet Union. One special challenge, given this starting point, is to make the best possible use of the human capital formerly engaged in such activities. Hopefully those with professional skills will become entrepreneurs or otherwise important inputs in high-tech smaller firms. Ideally some large enterprises will succeed in turning to other products, preferably ones which involve less capital and energy intensive technologies.

As of 2001, 43 percent of employment was in enterprises of more than 250 workers (averaging nearly 1,000 workers each), another 19 percent in medium-sized enterprises of 51-250 workers, 7.7 percent self-employed, and the rest (30.5 percent) in small enterprises (Table 13). By 2001, a large majority of firms had been privatized, with only 309 of the 2,158 firms in a representative sample taken by the International Finance Corporation still in the state (national or municipal) sector (Table 14). New private firms (established since this became permissible in the late 1980s) accounted for nearly half of the firms but not for many larger ones and hence for a much smaller share of employment (perhaps about 9 percent) than the privatized firms (60-65 percent) and those still under state control (25-30 percent of employment). The smaller the enterprise, the greater the share that was created as start-ups. Of the start-ups, most were created since 1996.

Table 13: Projected Employment by Industries, 2001 (thousands)

Industry	Self-Employed	Firm Size						Total
		Small				Medium-sized	Large	
		1-5	6-10	11-50	Total Small			
Construction	104.2	48.1	104.9	607.9	761.0	837.3	1,160.1	2,862.6
Manufacturing and agribusiness	69.5	80.5	153.6	742.6	976.6	1,386.0	5,699.3	8,131.4
Transportation and communication	66.2	34.2	48.6	191.1	273.9	410.5	773.4	1,524.0
Trade	661.8	397.8	465.8	1,207.2	2,070.8	504.0	644.5	3,881.1
Public catering	38.1	34.2	57.6	199.8	291.6	61.0	46.0	436.6
Finance, insurance, and real estate	6.6	28.7	38.4	104.2	171.3	69.1	184.1	431.1
Services	711.4	302.5	409.5	1,289.7	2,001.7	796.6	699.8	4,209.5
Total	1,657.8	926.0	1,278.5	4,342.5	6,546.9	4,064.5	9,207.3	21,476.4

Source: BIZPRO in collaboration with KIIS, 2001, p. 10

Table 14: Sample by Sector, Firm Size, and Firm Origin

Sector	Firm Size			Firm Origin						Total
	Up to 50	51-250	More than 250	State-Owned		Privatized		Start-Ups		
				National	Municipal	Early	Late	Early	Late	
Manufacturing	375	328	302	128	23	290	248	142	174	1005
Construction	96	55	18	14	3	45	28	40	39	169
Transport	40	35	40	12	22	22	27	7	25	115
Telecoms	44	2	4	7		1	2	14	26	50
Trade	362	45	11	10	7	72	57	76	196	418
Public catering	134	11	0	18	3	26	30	26	42	145
Other services	157	58	41	26	36	53	31	51	59	256
Total	1208	534	416							
Firm Size										
Up to 50				69	28	167	170	285	489	1208
51-250				63	20	187	146	59	59	534
More than 250				83	46	155	107	12	13	416
Total				215	94	509	423	356	561	2158

Source: Yacoub et al., 2001, p. 8.

Along with the transfer of business from the state to the private sector, there has been a shift in the size structure from larger to smaller enterprises. Thus, between the 1999 and 2001 surveys undertaken by the Support to Micro, Small, and Medium Enterprise Development Project (BIZPRO) (BIZPRO in collaboration with KIIS, 2001) indicate the employment share of medium-sized and large enterprises fell considerably, from 66 percent to 61 percent; self-employment also fell, from 9.9 percent to 7.7 percent, whereas the share of the small enterprises moved up from 24 percent to 30.5 percent.³⁵ It appears that most of these changes in employment by enterprise size category have been the result of entry and exit.³⁶ BIZPRO (p. 4)

³⁵ A similar trend is reported on the basis of a study of the Kharkiv Oblast of eastern Ukraine (Kaganov, 2003). Over 1995-1999, employment in medium-sized and large enterprises fell by 20 percent with hiring in small enterprises more than making up this change.

³⁶ The 1999 decree on accounting and reporting may have encouraged some medium-sized firms to shrink or divide to become eligible.

reports an increase of 31 percent in the number of small firms but decreases of 19 percent and 22 percent for medium-sized and large firms, respectively, over this period. The increasing share of employment found in small enterprises does not reflect developments in agribusiness or manufacturing, where the share in medium-sized and large firms rose (p. 11). Overall, employment fell in the secondary sectors and in trade, with a big increase occurring in services, not unlike the pattern one sees in most market economies. A significant part of the expansion of the services sector is particularly welcome since it helps to fill in gaps in the economic structure inherited from a system in which that sector was viewed as “unproductive.” With the collapse of central planning the deficiencies in service supply became evident and much recent growth has taken place in these areas, including financial services, public relations and other business services (Thirsk, 2003b)

The years since 1999 in fact provide the first test since the reforms began of how enterprises will react to macroeconomic growth. The IFC survey of 2000 (Yacoub et al., 2001) reports that enterprises outperformed the economy as a whole in that year, as their real value added expanded by 11 percent and their real sales by 28 percent, compared with registered GDP growth of 5.9 percent and growth of non-agriculture only a little higher.³⁷ There was no difference in value-added growth by firm size (Yacoub et al., 2001, p. 20), although real sales grew faster in the smaller ones (p. 19). Start-ups grew above the average, with value added jumping by 26.5 percent. Between 1999 and 2000, the increase in the share of firms indicating they were profitable is surprisingly small, from 60 percent to 64 percent (p. 12).

Only after a few years of economic growth have been studied at the firm level with these surveys will it be possible to get a clear picture of how that is showing up at the enterprise level. Thus far, the data are consistent with an expected rise in the share of small firms because start-ups are usually in that size range. The fact that existing small firms may not have grown more than medium-sized or large ones over 1999-2000 (value-added data say they did not, sales data say they did) may be surprising and may reflect special difficulties they face (see below). In any case, however, the growth now occurring comes after a long and deep economic collapse, so much of it involves growing back to full capacity and may therefore not involve the same dynamics as will post-recovery growth. And since many capital, technology and skill-intensive large enterprises may be (or become) efficient, growth in that sector is natural and welcome even though, by itself it could not quickly make a dent in Ukraine’s employment challenge.

Problems and Progress in the Growth Environment of Firms

The expected response of SMEs in an overregulated, heavily taxed, and corrupt and changeable context would be to maximize profits in the short run, try to hide revenues and avoid taxation, limit investments in business expansion, and encourage informality. There is no doubt that the growth environment for business in general and especially for smaller enterprises remains

³⁷ Both the very high reported growth of value added and the even faster growth of sales, together with the much slower growth of GDP, suggest that there may be serious measurement errors in these enterprise data. If not, the survey must have been unrepresentative, the national accounts must have understated GDP growth, or a lot of output must have been lost in the process of firm closures.

difficult in Ukraine, with the tax and regulatory regimes burdensome and with the support system (credit, technical assistance, infrastructure, and market functioning generally) still falling far short of what it needs to become. But the evidence does suggest, at least for the last few years, that movement is definitely in the right direction.

Taxation. Business in Ukraine is vocal in its claim that taxation remains the biggest problem it faces, a view that seems to be shared by all categories of firms. (Yacoub et al., 2001, p. 86). This is not surprising in light of the fact that Ukraine began life as an independent country with government expenditures probably well over 50 percent of total GDP; as there was little external borrowing in the early years, taxes on value added were probably nearly as high. There was a sharp reduction of the overall tax burden during the 1990s, a major accomplishment made the more impressive by the fact that the government deficit has declined dramatically at the same time (Hansen, 2003). At present, though the level of taxes is still quite high (the average reported tax burden in a recent survey was 53%),³⁸ a perhaps even more important problem is the instability of tax legislation. In 2000, those surveyed firms paid an average of 11 taxes and other compulsory payments. Progress has been made in this area as well. Thiessen (2001, p.1) considers that the presumptive taxes introduced in 1998 for SMEs have mitigated the problems for these firms, but that a further reform appears necessary on grounds of simplification and transparency. Also, and underlying many other problems in the tax system, is the existence of tax arrears of potentially profitable enterprises which in fact have been rendered unprofitable by the debts owed them by other enterprises (Thirsk, 2003a).

Legislation and Regulation clearly remain a serious drag on business performance. In their ranking of barriers to business development in Ukraine (in response to the IFC's 2001 survey), all categories of firms placed a series of problems falling in this category just after the "tax problem"—that is, a non-level playing field, anti-competitive practices, corruption, and the burdensome regulatory environment (Yacoub et al., 2001, p. 45).⁴⁰ The so-called time tax (the percent of management's work time spent in dealing with state officials) was reported to be 15-20 percent, highest for the large firms and less for start-ups (14.2 percent) than the average of 16.1 percent (p. 81).

The business registration process has become somewhat less problematic, particularly in relation to obtaining licenses, permits, and approvals (BIZPRO in collaboration with KIIS, 2001, p. 29). Average time to get a certificate of registration varies from 4 days for the self-employed to 11 days for medium-sized firms. Time to get other permits needed to start a business is 13-25 days. The tendency for tax authorities and other public officials to pay inspection visits to firms has been falling.

Credit. The bank credit system is underdeveloped in Ukraine as reflected in its minuscule ratio of bank credit to the private sector as a percent of GDP, 8.8 percent in 1999, below Russia at

³⁸ Yacoub et al. (2001, p. 49) note that the sales figures from which value added was calculated were reported in sales bands by the respondents, who were also asked to estimate the value of all taxes paid as a share of sales. Probably considerable bias crept into this whole procedure, but there is no reason to doubt that the tax burden is at less reasonably high. The ratio in question was a little lower for small firms (44 percent) than for large ones (56.1 percent).

⁴⁰ If we disregard "low demand" and "inflation" as problems of a different character.

11.5 percent and in a different world from countries like the United States at 47.3 percent (Yacoub et al., 2001, p. 84). These low figures are reflected in the financing conditions of all groups of firms, but the smaller ones have, as usual, the least access. Bank credit was a source of funding for just 6.1 percent of firms investing in fixed assets in 2000 in 2000, 4.2 percent for small, 6.9 percent for medium-sized, and 10.6 percent for large. For working capital, these figures were 8.9 percent, 12.7 percent, and 25.2 percent (pp. 39-40). The BIZPRO-KIIS survey of 2001 found that one in five firms had applied for a loan over the last six months and that half of these had been successful (BIZPRO in collaboration with KIIS, p. 35). These firms, even those with one to five employees, sought credit mainly from banks. The self-employed, however, had much greater recourse to family and friends. The share seeking a loan was higher for all categories than in 1999, presumably because the economic recovery was raising the potential returns to capital. The share that sought a successful loan over the preceding six months rose from 17 percent in 1999 to 36 percent in 2001 for large firms, from 11 percent to 18 percent for medium-sized ones, and from 5 percent to 9 percent for small ones (p. 37).

By 2001, firms considered lack of working capital to be their biggest impediment to growth (replacing the tax system, which had been the highest-ranking problem in 1999).⁴¹ This is likely to reflect the better macroeconomic conditions and the greater growth opportunities they create for firms, as well, perhaps, as some modest improvements to the tax system.

Several practices that reflect a shortage of working capital have been on the wane. Use of barter to get inputs is less frequent than before. The share paying some wages in kind, which is inversely related to firm size, fell markedly between 1999 and 2001 (p. 23). Judging by these last three indicators, it is possible that a real improvement in liquidity and in market functioning has occurred since 1999.

Technical Assistance remains very scarce. Most business service providers remain from past donor investments, although a few commercial entrants are beginning to emerge, with demand for services weak but existent. One-stop shops have been launched, with the support of BIZPRO, in several towns to address all the service needs of the new firm. But Kaganaov (2003) reports public sector efforts to assist small enterprises in the Kharkiv Oblast in promoting government services in, for example, brokerage services for obtaining production space or equipment and in the provision of loans, information, and market studies, where the government's efficiency is questionable. In her judgment, the government could make a greater contribution by focusing on priorities like cutting the tax burden and reducing the costs of the regulatory apparatus. Clearly, development of a solid support system for SMEs in Ukraine has a long way to go.

⁴¹ The question posed in this survey related to impediments to growth, whereas that referred to above from the IFC's survey referred to barriers to doing business. This could account for modest differences in rankings.

CONCLUSIONS AND LESSONS

The transition process in Ukraine has been very painful, involving a sharp economic collapse, a significant increase in inequality, and hence a major rise in poverty. After a full decade of stagnation, growth has returned in the last three years and hopes that the country has turned the corner have risen. Many lessons have been taken from this experience by observers from a range of perspectives. The main ones we draw are the following:

1. Because of the extremely weak base of economic data for the 1990s there is considerable ambiguity as to exactly what happened to major economic variables (such as GDP) and as to some of the mechanisms at work. This informational weakness has roots in the transition from one system of economic control toward another, in the crisis itself, and in a lack of history and experience in the collection and analysis of certain types of now-important data. Whereas the official data indicate a GDP drop of 60 percent, a case can be made that the decline was as little as half this much or even less; our own guess is that GDP fell by 35-45 percent. Lack of comparable household surveys over the period means that an equal or greater level of uncertainty surrounds the question of how inequality and hence poverty have evolved.
2. The above shortcomings of information notwithstanding, the general picture of the 1990s events is clear. There was a major drop in GDP and in income and consumption per capita, with a resulting large increase in poverty. Unavoidable negative shocks in the form of loss of the external (i.e. Soviet) markets for much of the specialized output of Ukraine and an enormous increase in the price of energy contributed in a major way to this crash. So too did the collapse of governance which accompanied the break-up of the Soviet Union and the independence of Ukraine. Instead of the democratic and smoothly functioning market system predicted by some naïve Western advisors came an anarchic and corrupt system which further accentuated both the economic recession and the poverty of the common people.
3. The lack of governance has spawned a slow and in many ways ineffective reform process in Ukraine. An underlying cause has been the division of political power among reformers, anti-reform Communists, and rent-seeking opportunists and the way in which this division has contributed to an erratic reform process and to weak implementation of many of the steps that have been taken. It is unclear whether a sequencing of reforms could have been designed in such a way as to prevent the extreme levels of corruption that have emerged. Another deterrent to rapid progress toward reform is the institutional inertia of the former command economy, which leads to the maintenance of many policies that are counterproductive in the context of a market economy, including a dense network of regulations and an oversized group of bureaucrats in charge of them.
4. The objective of moving from a large-scale state and collective farm system (complemented by small household plots) to a system of individual family farms has made only modest progress, both because of strong opposition from some quarters (the Communist and opportunistic groups) and because, institutionally, the distance is long from the one system to the other. The process runs the risk of creating something closer to a

Latin American style *latifundia-minifundia* system of land concentration than a more egalitarian family farm system. The closer it comes to the former, the more anti-poor will the agricultural evolution have been.

5. Along with family-scale agriculture, the other main hope for future employment creation is the non-agricultural SME sector. It too confronts many institutional barriers to rapid success. The evidence does point to considerable growth of small enterprises, even as large and medium-sized firms have been cutting back on their employment levels. The recent economic turnaround has seen a continuation of small enterprise growth in spite of much complaint from those firms and from business in general about tax policy, regulatory policy, and a lack of access to credit.
6. There is an important debate about the source of the recovery since 1999. Some observers credit the last set of reforms (in 1999-2000); others, the good crops; and others, the return of some positive inertia after the economy finally hit bottom. The most persuasive view, we believe, is that the accidental devaluation of the hryvnia relative to other currencies than the Russian ruble (accidental in that it was the result of Russia's financial crisis in 1998) provided a major and general stimulus to the production of tradeables (both exports and import competing goods). This stimulus was complemented by a substantial underutilization of capacity. Further analysis is required to identify the relative importance of this factor and of each of the others. Which of them have in fact played the key roles in the turnaround has important implications for the appropriate course of economic policy in the future, both in Ukraine and in other reforming countries.
7. The Ukrainian system of safety nets, as commonly conceived, has been modestly successful in alleviating poverty but at the same time is seriously inefficient, in terms of the degree of leakage to the non-poor through lack of targeting or poor targeting and in terms of internal inefficiency in program delivery. Arguably of greater importance than all of these policies together has been the decision, taken in the Soviet Union before the reforms, to make sure that any family wishing to have a household plot for the production of food items would get it, and then to expand the size of those plots over the 1990s. This impressive step helped keep rural incomes at or even above the level of urban incomes through the mid-1990s and undoubtedly prevented much poverty.
8. As the original safety net-- a system of guaranteed employment together with an adequate level of pensions for pensioners, has been eroded and, with respect to guaranteed employment, continues to be eroded, it is important that the country develop a substitute system. To date, the household plot has been a main offset to the loss of those earlier guaranteed-income sources, but new ones must be put in place to tide the population over until stable well-paying employment is available to nearly all of those who wish it, much of it presumably from the SME sector.
9. While the dearth of relatively accurate data has not prevented our concluding that Ukraine suffered a traumatic economic collapse during the 1990s and that poverty rose sharply, failure to quickly rectify the remaining data problems will have more serious costs in future as it becomes important to know exactly how well given policy choices are working. The

national accounts figures remain weak, partly as a result of the need to shift from central-planning concepts to market concepts, partly because of the continuing importance of the hard-to-measure informal sector, and partly because of the need to build up the relevant human capital to maintain the information system. Figures relating to income and consumption inequality and to poverty also remain problematic, though the institution in 1999 of systematic household surveys means that the key step has been taken and now it is matter of gradually improving the quality of the data collected and the feed-back between analysts and data collectors. In these two areas of data collection and in others, much progress has been made but a considerable distance has yet to be covered.

10. Underestimation of the complexity involved in a reform process/transition like that of the Ukraine is damaging because it both leads to some bad policies being adopted and to delays in the implementation of needed ones. The most striking example of oversimplification was that of the Western economists who confused lack of restraints on markets with well-functioning markets; put another way, they failed to recognize that many markets, if they are to work well do require the constraints of an adequate legal system, of transparency, of minimum levels of competition, etc. Failure to recognize these needs contributed to the delay in embarking on the institution-building that must accompany such a major transition.

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APPENDIX A

**PROBLEMS AND ANOMALIES WITH THE RECENT HOUSEHOLD
SURVEY EXPENDITURE AND INCOME DATA**

PROBLEMS AND ANOMALIES WITH THE RECENT HOUSEHOLD SURVEY EXPENDITURE AND INCOME DATA

Ukrainian household surveys have always reported higher levels of expenditure than of income, and by a large margin. The distribution of reported household expenditures and incomes by decile of the per-adult equivalent expenditure distribution corresponding to the first three quarters of 1999 (Table A-1) reveals an average differential of 37 percent in favor of expenditures. As in most such surveys, reported consumption exceeds reported income at the bottom of the distribution (a 4 percent difference in decile 1). However, unlike most such surveys, the differential of reported consumption over reported income rises monotonically as one moves up the distribution. The norm in developing market economies is for it to fall, such that near the bottom decile reported income exceeds reported consumption and by the top decile this gap is large.

Table A-1: Average Expenditure and Income of Households Ranked by Level of Expenditure Per-Adult Equivalent, by Decile, QI-III, 1999

Decile	Average Expenditures	Average Incomes	Ratio of Expenditures to Incomes
1	78.9	76.0	1.04
2	110.4	98.9	1.12
3	131.1	108.9	1.20
4	150.0	123.2	1.22
5	168.8	131.9	1.28
6	189.7	145.4	1.30
7	214.1	160.8	1.33
8	246.8	176.2	1.40
9	296.0	197.3	1.50
10	458.3	270.2	1.70
10t/1st	5.8	3.6	
9t/1st	3.8	2.6	
Average	204.5	148.9	1.37

Source: World Bank, 2001, Vol. 2, p. 9.

The very high consumption/income ratios in this table strongly suggest that the surveys still suffer from an extreme level of income underreporting, which also rises markedly as one moves up the consumption (and income) scale. The average reported consumption to reported income ratio is 1.37. Because it is unusual for consumption to be overreported and since it seems unlikely that families in the aggregate were going into debt to consume more than they earned, the reasonable guess is that income is understated by over 30 percent of its true value.

Extreme reluctance to report incomes has been a characteristic of household surveys in Ukraine. Although having reported expenditures up to 20 percent above reported income was not uncommon in the traditional household surveys in the Communist bloc (Milanovic, 1998, p. 142), in Ukraine, the ratio in mid-1990s surveys was 2:1 (p. 33), confirming the huge

underreporting of incomes. The fact that this ratio is down to 37 percent in the first of the new household surveys marks a positive trend but suggests that there is a distance to go, and that it would be hazardous even now to draw much out of the income distribution data.

Another interesting anomaly in the recent Ukrainian household consumption data is that the reported food consumption to total consumption ratio is nearly constant across consumption deciles, at a very high level, averaging 67.1 percent. For the bottom decile, the average expenditure on foodstuffs is 72 percent of total expenditures; the top expenditure decile averages 61.1 percent of total expenditure on food. These ratios are much higher than those reported for all families together in the earlier household surveys available for the period before the 1990s, consistent with the fact that average incomes and hence expenditures have fallen. Thus, the figures from Kakwani presented in Table 3 show a food consumption ratio typically a little less than half of income and about 58 percent of expenditure (that is, income less savings) in 1989 but up to 64 percent and 73 percent in 1990 and 1991, respectively. These figures should be biased down by the disproportionate non-inclusion of poor families in the sample procedure at this time, but they probably suffered from other biases, perhaps underreporting of non-food expenditures relative to food ones because the latter were more continuous (easier to estimate accurately) and were based on home production.

Figures presented by Van Atta (1998, p. 609—see Table A-2) are different for 1990, indicating that only 33 percent of income and 37 percent of expenditures were directed to food. This figure then rose to 59 percent in 1995 and 57 percent in 1997. We are unaware of the source of the major discrepancy for 1990 because the estimates appear to be based on the same source, although it is unclear whether the recent-year figures were based on all the families in the survey. If the 1995 and 1997 figures presented by Van Atta are consistent with those of the recent surveys, the food share has risen further to 67 percent, not implausible if incomes have fallen further, although it is not clear that they changed much over the intervening years.

It remains puzzling, however, that the usually strong inverse relation between the shares spent on food and total income or consumption is not in evidence. This anomaly could stem from the correlation between nominal incomes and the prices families face for food, which would lead to a misranking of families and thus narrow the gap between the (true) real purchasing power of those at the bottom of the ranking in relation to those at the top with regard to the purchasing-power gap. This would weaken the usually observed income-food share relationship.

Table A-2: Family Expenditures in Ukraine, 1990-1997 (selected years)

Population and Year	Category								Total
	Food	Alcoholic Beverages	Non-food Consumer Goods	Housing and Utilities	Other Services	Taxes, Excises, and Fees	Other Expenses	Savings	
Percentage Share of Annual Average									
All Families									
1990	33	3	31	■	8	7	7	11	100
1995	57	1	17	■	8	4	9	4	100
1997	57	1	16	■	13	4	8	1	100
Urban									
1995	52	1	18	5	7	7	5	5	100
1997	49	◆	18	9	9	7	6	2	100
Rural									
1995	62	1	16	3	2	1	12	3	100
1997	67	◆	16	4	2	1	10	■	100
Annual Average in Hryvnia									
Urban									
1997	1,740	◆	631	343	321	264	211	67	3,577
Rural									
1997	2,732	■	633	174	88	44	408	●	4,079

Sources: Van Atta, 1998, p. 609. Compiled from *Biudzhetny*, 1996, pp. 20-22; 1998, pp. 21-23; and *Statystychnyi*, 1996, p. 390.

Legend	
■	Included in other services
◆	Included in food
●	-0.1% and -2.5 hryvnia

APPENDIX B

UKRAINE'S OFFICIAL POVERTY STATISTICS

UKRAINE'S OFFICIAL POVERTY STATISTICS

Official poverty line is a relative one, set at 75 percent of the median expenditures. A second poverty line of 60 percent of median expenditures defines extreme poverty. Based on this criteria, 26.7 percent of Ukrainian households were poor in 1999, and 13.5 percent were considered to be very poor (World Bank, 2001). The 1999 median level of expenditure was UAH 179.06 per person per month. Data tables from the State Statistics Committee for 2000 show that the median expenditure had fallen to UAH 168.2, and the proportion of the poor population had risen to 27.4 percent. The very poor made up 15 percent of the population. In the fourth quarter 2001 (Q IV), the median expenditure was UAH 191.20. The poverty headcount was 30.4 percent. In this relative scenario, the poverty headcount increased from 1999 to 2001. As is the case with relative poverty lines, however, the purchasing power of the poverty line differs from year to year and represents a moving target of sorts. Relative poverty is, in essence, a measure of inequality. Table B-1 presents relative poverty lines and headcounts, as well as the consumer price index (CPI), which can be used to adjust the poverty lines for inflation.

Table B-1: Relative Poverty Lines and Headcounts, Ukraine 1999-2001

	1999	2000	Q IV, 2001
Nominal poverty line, UAH/month (75% median expenditures)	134.30	126.15	143.40
Headcount	26.7%	27.4%	30.4%
CPI (base 1999)	100	125.8	133.5

Although relative poverty measures inequality, in Ukraine between 1999 and 2000 the median household expenditure fell, thus lowering the poverty threshold as well. This seems to indicate that even in an absolute sense, poverty was on the rise.

APPENDIX C

**SOURCES OF POVERTY INFORMATION IN UKRAINE:
A COMPARISON OF DEFINITIONS AND METHODOLOGIES**

**Table C-1: Sources of Poverty Information in Ukraine:
A Comparison of Definitions and Methodologies**

Source & Date Published	Data Set	Survey Methodology & Issues	Measure of Household Welfare:	Poverty Line Methodology	Poverty headcount
Kakwani, Nanak Income Inequality, Welfare and Poverty: An Illustration Using Ukrainian Data January 1995	Family Budget Surveys (FBS) carried out regularly in the Soviet Union since the 1950s by the State Statistics Committee Official price indices: retail price index to 1990 consumer price index from 1991	Issues: <ul style="list-style-type: none"> ▪ Sample size not known for Ukraine ▪ Not representative of the Ukrainian population ▪ Families in sample selected on basis of industrial affiliation of wage earners ▪ Pensioners originally excluded ▪ Understates poverty because probability of households being included increases monotonically with the number of wage earners in the household. 	Per capita household income Equivalence scale: none	Poor: Government's official minimum consumption basket (food plus non-food items). The poverty line was Krb. 14,345.00 per person per month in January 1993. Ultra-Poor: Government's official minimum consumption basket food component only, scaled up by a multiplier of 1.25. The 'ultra poor' poverty line was Krb. 11,862 per person per month in January 1993.	Poor: 11.53% in 1990 8.76% in 1991 29.75% in 1993 Ultra Poor: 5.49% in 1990 3.2% in 1991 16.88% in 1993
World Bank Poverty in Ukraine June 1996	"Ukraine '95" Survey conducted by the Kyiv International Institute of Sociology (KIIS) with funding from the World Bank and	<ul style="list-style-type: none"> ▪ 122 primary sampling units chosen at random ▪ 2,330 households selected for participation ▪ Final sample of 2024 households (84% response rate) Issues: <ul style="list-style-type: none"> ▪ one-off survey reflecting situation in summer 1995; understates poverty since summer and early autumn are the best times of the year in terms of social welfare (food most readily available, heating not a problem, etc.) 	Per capita household expenditure Equivalence scale: ?	Food component of Government of Ukraine's official minimum consumption basket priced on June 25, 1995: Krb. 3,069,000 per person per month. Non-food component derived by observed consumption of 100 households whose food consumption was closest to food component; geometric average calculated of ratio of food to total consumption (83.5%). The poverty line was Krb 3,069,000 / .835 = Krb. 3,675,000 per person per month in June 1995.	29.5% of households in 1995 31.7% of individuals in 1995

Source & Date Published	Data Set	Survey Methodology & Issues	Measure of Household Welfare:	Poverty Line Methodology	Poverty headcount
<p>World Bank Ukraine: Social Safety Nets and Poverty June 2001</p>	<p>Ukrainian Survey of Income and Expenditure (SIE) conducted quarterly by the State Statistics Committee (new methodology launched in 1999), cumulative data from first three quarters (QI-III)</p>	<ul style="list-style-type: none"> ▪ 195 sample towns and 190 rural districts ▪ Initial sample of 12,200 households, final sample of over 9,435 households, representative of the non-institutional population ▪ Income and expenditure tracked through weekly diaries and quarterly questionnaire 	<p>Per capita household expenditure</p> <p>Equivalence scale: slightly modified OECD</p> <p>Equivalence scale:</p> <p>First adult: 1.0</p> <p>2nd and subsequent adults: .07</p> <p>Children (regardless of age): .05</p>	<p>Poverty:</p> <ul style="list-style-type: none"> ▪ 75% of median expenditures. ▪ The poverty line was UAH 134.30 per person per month in 1999. <p>Extreme poverty:</p> <ul style="list-style-type: none"> ▪ 60% of median expenditures. ▪ The 'extreme poverty' line was UAH 107.50 per person per month in 1999. 	<p>Poverty: 26.7% of households in 1999</p> <p>Extreme poverty: 13.5% of households in 1999</p>
<p>Whitefield, Stephen The Political Economy of Welfare Reform and Poverty Alleviation in Ukraine January 2002</p>	<p>Poverty in Dnipropetrovsk Oblast Survey conducted by KIIS in February – April 1999</p>	<ul style="list-style-type: none"> ▪ Sample made up of 480 households drawn randomly from address lists and 320 households drawn from the register of those in receipt of housing subsidies ▪ Care taken to ensure sample representative of oblast population (particularly rural population). 	<p>Per capita household expenditure</p> <p>Equivalence scale: ?</p>	<p>Food component from the Ministry of Labor and Social Protection minimum basket of foodstuffs in local (Dnipropetrovsk oblast) prices in January 1999: UAH 85.47 per person per month.</p> <p>Non-food component measured by averaging non-food consumption of the 150 households with food consumption closest to food component: UAH 36.69 per person per month.</p> <p>Poverty line: UAH 122.16 per person per month in January 1999.</p>	<p>Total sample: 35 percent of households in 1999</p> <p>Sampled from housing subsidy list: 49 percent of households in 1999</p> <p>Not in receipt of housing benefits: 37 percent of households</p>