Realizing Ukraine’s Agricultural Potential

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The food and agricultural sector has greater economic potential in Ukraine than in any other country of the former USSR. This potential is due primarily to the country’s favorable agro-climatic conditions, which are well suited not only to the production of grains, oilseeds, root and fiber crops, and livestock but also to the cultivation of a wide variety of temperate fruits and vegetables. Comparisons of historical data prior to reform (the late 1980s through 1991) indicate that Ukraine was the lowest-cost producer in Central Europe and the former USSR for wheat, corn, sunflower seeds, and sugarbeets. Evaluating Ukrainian costs of production for these commodities, using world market prices for the material inputs, shows that Ukraine’s greatest absolute advantages are in wheat and sunflowers, while corn and sugarbeet costs are still below average costs in most other major producing countries.

Though Ukraine was one of the lowest cost producers of beef and pork in the former USSR prior to reform, it appears not to have an absolute advantage in meat production compared with major world producers (when evaluating Ukrainian material costs at world market prices). In addition, its meat production suffers from quality problems and its slaughter plants are not certified for most developed country markets. Nevertheless, it

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could continue to be a competitive supplier of lower-quality cuts to the market of the former USSR (mainly Russia).

Indeed, Ukraine has traditionally been a large exporter of food and agricultural products (with net agricultural and food exports of US$2.5 billion in 1988–90). However, performance of the sector during the latter years of the Soviet Union's existence was still below potential. In the late 1980s, crop yields were only 60–75 percent of those in Western Europe, fertility yields of livestock were 25–30 percent lower, and feed conversion ratios were less than 60 percent of Western levels. Waste was high throughout the food chain because of large losses in transport from the field and in on-farm storage, as well as low efficiency and spoilage in food processing, owing to outdated technology. In addition to high losses of raw product in processing, energy intensity in Ukraine is very high compared with world standards. Thus, Ukraine's comparative disadvantage in food processing can offset its absolute advantage in the production of raw commodities, as appears to be the case for refined sugar and canned fruits and vegetables.

Output Decline in the Early Years of Transition

From 1990 to 1995, the agricultural sector's output declined by more than 30 percent. This decline in agricultural and food processing output is partially the result of factors outside the agricultural sector's control: high inflation and erosion of working farm working capital, increased real costs of agricultural inputs, overall decline of real wages and domestic demand, and the breakdown of payment channels with countries of the former USSR.

However, this decline also reflects the impact of unsustainable agricultural policies that are a legacy of the past. Collectivized agriculture and routine covering of enterprises' losses eroded labor incentives and rewards to management for containment of costs and resulted in low levels of factor productivity. High investment levels in field mechanization and livestock raising facilities in the 1970s and 1980s did not improve efficiency, and output growth slowed as the marginal increases in output owing to increased use of fuel, fertilizer, feed, and other variable inputs declined to very low levels. Moreover, the cumbersome mechanisms of central planning and control resulted in monopolistic and inefficient distribution systems for agricultural inputs and outputs. The availability of imported variable inputs such as fertilizers, agrochemicals, and seeding and spraying equipment was severely rationed, leading to insufficient use of these high-quality imported inputs.
The state supply and purchasing system has been continually eroding through the 1990s. The government ceased in 1992 officially setting most agricultural output and input prices, but maintained considerable control over prices through state contracts and state orders. Monopolistic state trading agencies exerted substantial pressure on farms to sell at low prices by making these sales a condition for the supply of otherwise hard-to-get inputs and credit. The rise of input prices to largely world market levels in 1993–94 was not accompanied by a similar rise to border price levels for farm outputs. Since state orders and contracts dropped substantially in 1994–95, the depressed level of farm gate prices stimulated the growth of buying activities by private and foreign wholesaling and exporting firms. Moreover, farms have begun dealing more often than in the past directly with enterprises that process commodities further or retail them. Still, the uncompetitive nature of state procurement enterprises and export licensing, quotas, and taxes caused poor transmission of border prices to the farm level until late 1995. The result was a sharp worsening of agriculture’s terms of trade. Addressing this problem requires improved linkages to international markets; privatization and demonopolization of the agricultural input supply, marketing, and processing enterprises; and land reform and farm restructuring.

Until 1995, there was a widespread misconception in the government that agriculture’s problems were transitory; that they could be overcome through advanced technology, better management, and the maintenance of large-scale production systems; and that subsidization of inputs could be continued during the transition. Monetary emissions by the central government to finance input supply and output marketing operations in early spring and late summer served to raise inflation and perpetuate the heavy involvement of state enterprises under ministerial direction in agricultural marketing. The combination of heightened inflation and payment delays by these state enterprises consistently eroded farm income. What was impressive about the agricultural sector’s performance in the period 1991–94 is that structural change occurred in spite of attempts to maintain production levels and composition by essentially throwing fiscal and financial sector resources at the agro-industrial sector. Factor intensities and the composition of production have adjusted markedly since 1991, and in the directions one might have expected.

The resumption of growth in the sector, a growth that is market oriented and sustained by self-financed productivity gains, requires reforms and the kinds of support that serve to focus agricultural policies and the role of government squarely on the requisites of medium-term development. Still, it is unrealistic to expect that a recovery in agriculture will support the country during transition until manufacturing and services
can reverse their slide and get back on their feet. Policymakers should not expect export-led growth from the agro-industrial sector to lead the recovery of the Ukrainian economy. The agro-industrial sector is simply too technologically backward and too unprepared in terms of the capability of marketing institutions; it suffers from all of the problems that plague other sectors—lack of commercial orientation, low productivity and obsolescence, and nonexistent or at best very unreliable financial sector services.

As economic recovery proceeds in Russia, the Baltic states, and other countries of the former USSR, restoring and developing markets and business relations with these countries may offer the best opportunities for Ukrainian agricultural exports. Expansion into developed country markets will be hampered by perceived quality problems and, in some cases, import barriers that inhibit access and reduce prices for Ukraine's agricultural products in hard-currency markets, particularly in the European Union. While Ukraine's eventual membership in the World Trade Organization will give it increased world market access, restrictions on agricultural imports by many countries will limit Ukraine's ability to boost agricultural exports. Nevertheless, many developing countries (particularly in the Middle East and Pacific Asia) offer significant market opportunities for expanded agricultural and food exports by Ukraine.

**Agricultural Reform Goals Set and Measures Implemented**

In 1994, it became apparent that a faster transition to a free market in the agriculture sector would be required to restore this sector to profitability. In particular, greater liberalization of export markets is now understood to be critical in a country that has a comparative advantage in agricultural production and is traditionally a net exporter of agricultural products. Recognition by the government that the financing of seasonal peaks in agricultural operations must be market based also represents a key realization in redefining agricultural policy. In October 1994, the agricultural reform directions announced by the president of Ukraine, Leonid Kuchma, initiated the first comprehensive reorientation of agricultural policies. They support the creation of tradable private property rights in agriculture and the rest of the agro-industrial sector to motivate farms and other enterprises of the agro-industrial sector to pursue profitable activities and to generate competitive mechanisms that indirectly regulate these enterprises' profits and promote efficiency. The specific measures declared by the president as integral to agricultural reform include liberalization of food prices; agricultural export liberalization; de-
velopment of agricultural commodity exchanges; distribution of land plots to farm workers and other eligible beneficiaries; and privatization of agricultural supply, marketing, and processing enterprises.

Ukraine took major steps in implementation of the reform measures emphasized by President Kuchma with the support of the IMF Systemic Transformation Facility and the World Bank's Rehabilitation Loan (negotiated and signed in November-December 1994). The government's Rehabilitation Program removed most food price controls, abolished all export quotas on agricultural products (except grain), and agreed to make at least half of state purchases of agricultural commodities through the commodity exchanges and other competitive tender mechanisms. The government now limits agricultural purchases financed from the state budget to levels consistent with the needs only of social sector organizations (schools, hospitals, the armed forces, etc.). This amounts to a substantial reduction of state agricultural procurement. To promote land reform, the government has introduced draft legislation to eliminate the moratorium on sale of agricultural land, to mandate the delineation of land plots to those entitled to land under the Land Code, and to institute a registration system for land and other real estate. Agreement was also reached to initiate the privatization of agricultural infrastructure, including grain silos and elevators, in 1995.

Further Reform Steps Under Agriculture Sector Adjustment Loan

The agricultural reform steps implemented in 1994–95 and supported by the Systemic Transformation Facility and the Rehabilitation Loan need to be supplemented by a wider set of agriculture-related policy reform measures that are being supported by an Agriculture Sector Adjustment Loan of the World Bank. The policy reform measures being implemented by the government and supported by the loan focus on increasing efficiency within the agricultural sector and promoting market development. Taken as a package, these measures will increase farm gate prices, allow more elastic response to price changes, and lay the foundation for increased access to credit through the banking system. They should facilitate a growth of net agricultural output of 15–20 percent over the period

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1 Maximum profit and marketing margins for bread products remained in place, but implicit consumer subsidies on these products were reduced after fixed prices were abolished.

2 The export quota on grain was abolished in February 1996.
The main measures being implemented are in the following areas: (1) agricultural market liberalization, including changing government procurement methods that impede the development of private intermediary activities and the removal of remaining profit and marketing margins in the grain and bread subsectors; (2) trade liberalization, including the rescission of grain export quotas and discontinuation of the imposition of indicative prices on trade contracts; (3) land reform, encouraging the development of a sector of viable farm management units by establishing the legal basis for division and privatization of large farms; (4) privatizing, demonopolizing, and encouraging market entry in the production, processing, and marketing of agricultural inputs and outputs; and (5) establishing a framework of agricultural market information services and restructuring state agricultural institutions to focus on the role of market facilitator.

Market and price liberalization would be continued by the government by removing the remaining profit and marketing margins in the grain and bread products sector, making government procurement contracts open to a wider scope of private intermediary enterprises, and actively reducing the trade policy and macroeconomic risks that input supply and marketing enterprises face. Above all, this means containing and reducing inflation by ensuring strict adherence to the presidential decree limiting budgetary expenditures for state procurement to only those purchases (including those of agricultural goods) necessary to meet the needs of social sector organizations such as hospitals, educational facilities, and the armed forces. To promote agricultural markets in which both private and state-owned enterprises can participate, all state agricultural procurement would also be executed on a competitive basis, through open tenders and purchases on commodity exchanges. Intermediaries and marketing enterprises would be encouraged to participate more widely in the agricultural commodity exchanges to increase competition for output from agricultural enterprises, which do not usually have the trading expertise to access the commodity exchanges directly themselves.

An anomaly exists in the tax code such that the rate of profit tax on intermediary activities is currently 45 percent, compared with 30 percent for most other sectors of the economy. By reducing this high rate of profit tax to the rates assessed on other activities, the creation of private wholesalers, service and marketing enterprises, and a wider set of commodity

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3 The crop sector is expected to expand by 4–5 percent annually as it represents the area of greatest untapped potential, and that historically most taxed by state pricing policies. The livestock sector is expected to grow only 1–2 percent a year, given the dual challenge of substantially improving the herd’s genetics and penetrating strong export markets.
exchanges, transport, and trade companies would be facilitated. Traders operating in the informal sector would also be encouraged to enter the formal sector, thereby increasing the profit tax base. These developments would give agricultural producers alternative sources of supply for inputs and alternative buyers of their output that they could access if state-owned enterprises (both suppliers and customers) offered them unattractive prices.

Opportunities for private input suppliers and output marketers are clearly growing, as state procurement of agricultural products was reduced significantly in 1994–95. State purchases in 1994 measured as a share of total marketed production were roughly 40 percent of average 1989–92 levels. They fell to 10–20 percent of these average levels in 1995. At this level (roughly US$750–850 million) state purchases represent 5–7 percent of net agricultural output. Similarly, advances of working capital by the government to farms (traditionally through the procurement enterprises) have been curtailed. Thus, farms have become less tied to the state suppliers from which the state used to arrange input deliveries. Since traditionally these advances have been interest free (or at least at highly preferential interest rates), credit subsidies to farms and procurement enterprises fell from over US$500 million in 1994 to US$250–350 million in 1995.4 The volumes of agricultural output formerly purchased through the state are now finding their way directly to enterprises (both private and state-owned) at higher prices and on commercial terms (including more prompt payment).

Thus, in the area of market intervention and financial policies, the government recognizes that Ukrainian agricultural markets are beginning to respond to export liberalization with higher farm-gate prices and that these prices will increase further as remaining market restrictions are removed. Parity with prereform relative prices of outputs to inputs will not be achieved in future since total input subsidies exceeded implicit taxes on farm gate prices in the prereform period. Nevertheless, substantial improvements over current relative prices of agricultural outputs to inputs are clearly possible for most products (except some livestock products) if the market is allowed to work. For goods of which Ukraine is a low-cost producer, the government’s concern is not stagnant prices but rather how to secure a social safety net to support those most affected by food price increases. For agricultural products for which domestic markets have con-

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4In 1996, these credit subsidies are estimated to have fallen to less than an equivalent in karbovanets of US$130 million as working capital is advanced to farms almost entirely through state “forward” contracts whose price is discounted from the expected spot price at harvest time (both expressed in U.S. dollars).
tracted and for which foreign markets remain generally restricted (espe-
cially meat and dairy products), supply reduction, improved productivity,
and the market would be relied on to solve these products' currently ad-
verse terms of trade.

Increasing the level of international trade is crucial to improving farm-
gate prices for Ukrainian agricultural output. Without strong links of agri-
culture to export markets, the prices that farms receive for their output
will continue to be out of balance with the world market prices they pay
for inputs. Allowing real farm-gate prices to increase through greater
access to foreign markets would be more successful than attempts to sup-
port agriculture through subsidized credit to state agricultural procure-
ment enterprises and input subsidies. This is because these subsidies have
not supported agricultural terms of trade since they have been offset en-
tirely by implicit taxes imposed through repressed farm gate prices. More-
over, these subsidies have fueled inflationary expectations and distorted
input use.

Ukraine has a regional comparative advantage in agricultural produc-
tion that has historically made it a net exporter of agricultural products to
the Soviet Union and, prior to 1930, to much of Europe. Ukraine’s future
economic growth is also expected to be partially dependent on agriculture
to boost exports and reduce balance of payments shortfalls. However, this
will require the development of private trading institutions and agencies,
financial and payments arrangements, and trade policies and systems that
facilitate trading transactions and encourage the integration of domestic
and external markets. This will be particularly important for expanding
exports to convertible currency areas.

The removal of virtually all export quotas on agricultural products in
December 1994 was an important step in righting the imbalance between
Ukrainian farm-gate prices for outputs and the prices of agricultural in-
puts (which have risen to world market levels). This will likely be the
most important source of higher profits and greater working capital for
farms in the short term. The positive impact of removing export quotas
on agricultural products was very nearly offset in early 1995 as the impos-
sition of a registry system for barter transactions was narrowly averted.5
Moreover, by maintaining export quotas on grain in 1995, the producer
price of a key agricultural output was kept low, thereby reducing income
for virtually all farms.6

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5Agricultural exports usually are the method by which input supply firms receive payment
for the inputs that they supplied months earlier to agricultural enterprises on credit in kind.

6More than 30 percent of agricultural land in Ukraine is used for grain crops.
Registration and imposition of indicative prices by the customs service on barter deals has imposed excessive implicit taxation on the use of barter transactions. In February 1996, the government removed the remaining agricultural commodities from the export registry system and abolished the imposition of indicative prices on agricultural products. In the medium term, barter trade will be relied on less once international payment mechanisms evolve for the efficient and timely execution of export contracts. Therefore, the restructuring of the financial sector and strengthening of commercial banks are critical to progress in this area.

Land reform and farm restructuring, including the privatization of land and the establishment of independent private farms, have progressed slowly to date. The Land Code of March 1992 clearly laid out farm members (both current and retired) of collective and state farms as the ultimate owners of most of the land of Ukraine’s farms. The transfer into private ownership of land and other farm assets is specified (in the Land Code and supporting legislation) as a legal right of these farms’ members but a right that can be exercised only upon withdrawal from the farm membership. Given this stipulation, the lack of defined procedures7 for withdrawing one’s shares of land and nonland assets from the farm enterprise, and the opposition of many farm directors to withdrawal of such assets, less than 1 percent of farm members have withdrawn from their farm enterprises and taken their assets with them.

As of late 1995, new private farmers controlled only 1.5 percent of Ukraine’s agricultural land. An additional 11.8 percent of Ukraine’s agricultural land was also farmed privately in 5 million hectares of subsidiary plots and gardens. Despite the approval by the Ukrainian parliament’s Agricultural Committee of amendments to the Land Code to facilitate the privatization of land and other farm assets, the principle of unrestricted private landownership, and private agriculture is still viewed by some political entities as a supplementary component of a farming structure based primarily on collectively owned large-scale units. Uncertainty about future legislation on landownership, and the risks involved in private farming given the absence of a competitive input/output marketing and credit system, have substantially limited the establishment of independent private farms.

The restructuring of collective agricultural enterprises (former collective and state farms) would focus on three major principles: (1) freedom of decision for farm members about future organization of production and

7These procedures were finalized in December 1995 and adopted by the government in the first half of 1996.
the distribution of the ownership of land and other assets; (2) explicit procedures for the distribution of land and other productive assets to the members in physically recognizable form and not as anonymous shares; and (3) promotion of competitive input distribution and marketing enterprises that serve restructured farms.

To introduce these principles, additional legislation has been drafted and would be implemented to facilitate withdrawal of land and nonland assets from collective agricultural enterprises by those who have been allocated rights to this property under the Land Code. These withdrawals could not be legally impeded by either farm management or the farm members' council. This will enable those working in agriculture to formally exercise claims to the land and farm assets to which they are entitled under existing law and to establish viable private farms individually or in cooperation with other private owners of agricultural assets. In addition, the importance of establishing private property rights and a proper title registration system is crucial to introducing market relations in agriculture. It would allow buyers, sellers, lenders, and others to establish with certainty their rights to real estate and facilitate the use of real estate as security for investment. Procedures for mortgage of land and other real estate are also to be implemented under the World Bank's Agriculture Sector Adjustment Loan.

Legislation would be adopted by the government enacting a title registration act. This law would contain the following features: (1) the combination of record keeping for land, buildings, and other real estate in a legally recognized report format; (2) accessibility by all interested legal entities and physical persons to this information on owners of land and other real estate and on transactions related to the disposal of this property; and (3) state guarantees of accuracy and reliability of this information funded partially by means of modest fees for the registration of these transactions.

Privatizing the agricultural distribution and processing system has been initiated in Ukraine, but restructuring in this sector needs to be expanded beyond its current scope. Of roughly 4,000 large and medium-scale nonfarm enterprises in the agro-industrial sector, about 10 percent had been privatized by early 1996. Many of these enterprises were privatized through the "lease-with-buyout-option" method, through which they have become closed joint-stock companies owned by workers and managers. Fewer option joint-stock privatized agricultural enterprises were

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8The inclusion of movable property in the registry is also being contemplated by the government because the use of agricultural vehicles as collateral may prove to be of importance for new private farmers.
formed and even fewer with infusions of capital for restructuring from foreign participation. Given the slow pace of agro-industrial sector privatization, a number of presidential decrees on accelerating this process have been issued: their aim was to give farm enterprises that have supplied processing plants with raw product a preferential right of access to the enterprises’ shares (purchased at the same book value as enterprises’ workers and managers are allowed to purchase). This is a legitimate principle, as long as it is not taken to an extreme and as long as it does not generate legal conflicts between farmers and enterprise workers that further delay the privatization process.

Like many sectors in the Ukrainian economy, the agro-industrial sector is characterized by a high degree of monopoly. These are not firms that for technological and cost reasons could be considered natural monopolies. On the contrary, they are artificial monopolies that have been administratively created from separate firms to facilitate the execution of central plans. Having been freed from a centrally planned pricing structure, they try to compensate for their low productivity in processing and marketing by offering low prices (below border prices) for farms’ commodities and charging comparatively high prices for agricultural inputs sold to farms. The government recognizes that price liberalization and reduced government intervention in commodity markets will not be fully successful in transmitting world price levels for agricultural commodities into Ukraine unless input supply and output marketing are substantially demonopolized. The Antimonopoly Committee has begun actively demonopolizing enterprises of the agro-industrial sector deemed to be monopolists rather than simply regulating their prices.

Thus, the expanded agricultural policy reform program supported by the government would include three main components. First, the methods of privatization of agro-industrial firms would be adjusted to permit earlier recapitalization of these firms with new investment through open joint-stock enterprises. Second, and equally important, is the acceleration of the pace of privatization of agro-industrial enterprises through explicit government targets for the number of firms to be privatized in the short and medium term. Without these measures, too many agro-industrial enterprises would be decapitalized and go bankrupt over the next two to

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If a May 1996 Ukrainian parliament law on agro-industrial privatization had gone into effect, farm members would have been given rights to 51 percent of the assets of agro-industrial enterprises without making any payments. This was widely perceived as disregarding the equity considerations of enterprise workers and the general public, which can also use its privatization vouchers to purchase shares in agro-industrial enterprises. The president of Ukraine vetoed this law.
three years. Third, the government would immediately institute rapid de-
monopolization of agro-processing, input supply, and product marketing
systems, and enforce current regulations that define permissible levels of
concentration in the agro-industrial sector.

New roles for government are being introduced to take the place of the
past role of direct management of agricultural enterprises. The preparation
activities for the Agriculture Sector Adjustment Loan, which focused on
developing a monitoring framework for the policy reforms, support the de-
development of the government's ability to quickly provide agricultural mar-
tket information. This information will serve as the basis for subsectoral
analysis in agriculture and provide the foundation for the government to
eexecute its policymaking function soundly. The principal reduction of gov-
ernment responsibility in the agricultural sector would be the dismantling
of the current "agro-industrial complex" governmental management struc-
ture. What is needed is not merely changing the names of the various min-
istries, but radical modification and/or merger and downsizing. Units re-
lated to central command and direct interventions would be dismantled,
while those remaining would be reorganized, streamlined, and managed to
meet the needs of a free market economy. These further steps will be sup-
ported by the government's Public Sector Reform Program, and the Bank's
Agribusiness Development Project and Title Registration Project.

Conclusion

If the government is able to maintain the momentum of the past 2
years toward liberalization and policy neutrality in agricultural and food
markets, the tasks ahead are clear—to deepen and extend the policy re-
forms needed to encourage greater productivity and efficiency and to
modernize the agro-industrial sector. This requires an unbridled effort to
maintain economic stability and to apply to agriculture as faithfully as to
other sectors Ukraine's generic reforms, which promote state enterprise
privatization, private sector development, the creation of a competitive
environment, and the enforcement of bankruptcy, liquidation, and re-
structuring procedures for both farms and agro-enterprises. This agenda,
while comprehensive, is not unrealistic, as most of the associated legisla-
tion and decrees are already in place. Within agriculture, the agenda can
be supported by legal and administrative steps to further clarify property
rights, and a deepening of land reform to foster true and sustainable fam-
ily or associative farming.

If reforms are to have an impact, Ukrainian agriculture urgently needs
to be recapitalized and modernized. Investment is needed at the farm level,
in product distribution systems and marketing chains, agro-processing, and input delivery systems. In some regions, this will have to be supported by investments by the state in physical infrastructure. Without investment, it seems somewhat naive to expect that agricultural production in Ukraine will respond to the country’s comparative advantages in agricultural and food products.

The source of finance in the short to medium term will mainly come from boosting export capability closer to its potential: commodity handling, transport, inspection, and prefinancing (through crop collateral) are the urgent priorities for both private and public investment. Significant profits can be made by exporting grain and feed, so long as grain prices remain high. (This is the way that major grain and feed exporting countries periodically recapitalize and then modernize their own agro-industrial complexes.) But high prices may only last another few years, so if Ukraine really wants to benefit from the current window of opportunity, it must move fast on the policy and investment fronts.

In mobilizing resources for working capital, every effort should also be made to increase reliance on futures options and hedging. The country’s nascent commodities exchanges can be used as an entrée into commodity futures, once Ukraine’s international payments systems, clearing procedures, and transaction financing facilities can be straightened out and developed. Though creating a land market is essential, it must be viewed as only an eventual solution to the current need to stimulate the financing through the collateralization of ownership rights.